JESUS DE LA VILLA

100 Endgame Patterns You Must Know

Recognize Key Moves & Motifs and Avoid Typical Errors

NEW IN CHESS

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Jesus de la Villa

100 Endgame Patterns You Must Know

Recognize Key Moves & Motifs and Avoid Typical Errors

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Introduction

The rationale for this book

The urge to write this book originated in all the years that I have been working as a trainer, and more particularly in the huge number of games I have observed and analysed, played by developing players – not only my students, but often also their opponents, or anyone else whose games have crossed my path in my investigations. The specific locations where I have observed and analysed more games each year have been the Spanish Junior Championships, held on the last nine occasions in Salobreña (Granada), and the European or World Junior Championships. Examining these games, I discovered over and over again that the mistakes that are made can be grouped together and are often repeated. I thought about a lot of things that I had not considered before regarding the reasons behind the most common mistakes, and I became more and more convinced about the theory of patterns, because I seemed to be discovering that the cause of many mistakes was the lack of familiarity with one pattern or another.

Of course, these mistakes can occur at any stage of the game, and in all cases they are worth attention, but I decided to focus in the first place on endgame positions, first theoretical endings and then practical ones, and I set to work compiling interesting examples.

From the start, I wondered whether these mistakes were being made because they were patterns which were not known, or which had been studied using unimpressive examples, although I believe that in the majority of cases, the answer lies in something as trivial and mundane as carelessness.

The aim of this book is to present, with good examples and, therefore, in a clear fashion, those situations which I consider to be useful patterns in positions with few pieces, the study of which should allow us to eliminate mistakes which we can consider systematic.

This book is not exactly a continuation of my earlier book *100 Endgames You Must Know*. It would be more accurate to say that they complement each other, since *100 Endgames You Must Know* concentrates on theoretical endgames, while this book deals precisely with the stage of the game that precedes the appearance of the theoretical endgames.

Beginning with one book or the other, or alternating between them, may be a matter of experience or taste, but it is probably more systematic to start with the study of theoretical endgames.

For the student who began with *100 Endgames You Must Know*, this new book is a further step in his immersion in the world of endgames. In order to take this step it is most advisable, and in some cases necessary, to be familiar with the theoretical endgames, in order to analyse, and consequently to fully understand, the basic-level practical endgames, which are the ones presented in this book.

In theoretical endings, there already appear some of the patterns which subsequently appear in positions with more pawns, which will serve as a useful introduction, whereas other patterns are completely new and they would make no sense in positions with only one or two pawns.

Learning endgame theory and learning typical patterns can also be carried out simultaneously, as I do not think we should discount the role of serendipity in chess progress. The performance-enhancing aspect of merely studying positions is always a result of the increase in interest, sometimes even passion, which is aroused when a topic is approached in circumstances other than the purely systematic ones, such as for example its resemblance to an endgame which has just been completed, or which has just been seen in another game, and which has given rise to a 'significant increase' in our level of curiosity.

Defining the endgame

For ever and ever, we have heard that there is a stage of the game called the endgame, that it is the third stage, and that it follows the opening and the middlegame. This stage has characteristics which are sufficiently differentiated to merit this division, both from the point of view of the competitive struggle and from that of analytical investigation. However it has never been clearly pinned down by a definition, which has led to a range of interpretations, such as for example describing positions with several major pieces as 'the fourth stage of the game'.

If we search on the Internet for a rough definition of the endgame, which many amateur players may well do, we shall perhaps find something similar to the following: 'The endgame is the third stage of the game, in which there are few pieces left on the board and the final outcome is imminent.' The idea that the final outcome is imminent might amuse us, because some endgames go on for ever, but the real problem of this attempt at a definition, and of other attempts, is how many pieces constitute 'a few pieces'? Some writers sidestep this definition by material and are of the opinion that the endgame is the stage of the game when there is no longer an obvious danger of mate. Although there are some endgame positions where one plays for mate (see **Pattern 86**), this conceptual division is very good, because the characteristics of the endgame, which in the first chapter we shall call 'Distinctive facts', are based precisely on the fact that mating plans are infrequent. However, this division does not allow us to establish a classification of endings according to the material remaining on the board, since this makes it depend on a circumstance which is separate from such a classification. And of course, the classification based on material, although it may be rather limiting, makes matters regarding investigation and learning much easier.

It is a fact that positions which are usually called endgames coincide with those where there is little danger of mate. Nonetheless, in some cases positions with quite a lot of pieces are spoken of as endgames, simply because the queen has been exchanged, which is clearly incorrect. I think that a reasonable definition would be to consider as endgames those positions where the player with more material has a maximum of two pieces, provided that one of them is not the queen. This would rule out, among others, positions with queens and bishops, which we can consider borderline and which in many places are studied as endgames; and of course many people will not agree, but it comes very close to the general sense of what an endgame is, and tries to confine it to a classification by material, which for some questions is useful and almost necessary.

I propose therefore to consider as endgames those positions where the stronger side has a maximum of two pieces, without counting the king and the pawns, and provided that the queen is not one of them. However, in this book I shall look only at positions where the stronger side has one piece. The first reason is that the idea of patterns lends itself much better to positions with one piece, because the patterns arise from the properties and limitations inherent in the movement of each piece. The second reason, equally decisive, is that to include patterns found in two-piece endgames would require much more research and more space. Patterns with two pieces introduce many new elements and are also very interesting; I do not know whether I shall return to this at some time.

Some thoughts on the system of patterns

At all stages of the game and in all its aspects, not only in endgames, but also in tactics and strategy, mastery is achieved through accumulating knowledge of patterns.

Experts' skill in rapidly understanding the keys to a problem, which is sometimes called intuition, is not a magical quality; it is the result of years of investigation and experience which always leads to the same scenario: familiarity with a large number of patterns.

Some theories talk of 50,000 or 100,000 patterns, accumulated through 5,000 or 10,000 hours of study. The exact number is not important; it is even possible (I would say probable) that different people store them in different ways. What matters to us is the method of discovering and using patterns, and ascertaining which ones are really common at the stage which we are studying.

It is easy to think that patterns merely guide us towards the idea to be followed. Even more so when we tend to read (often with reference to endgame positions): 'now it's all a matter of calculation and theoretical knowledge is of no use'.

As a matter of fact, I believe that is not the case, and that stored patterns are just as important in calculating variations as in establishing little plans, because they guide our selection of candidate moves at each moment.

So it is a question of improving intuition by analysing positions, not in a random way though, but focusing on representative positions in which over and over again we can find interesting ideas, which recur in different variations and subsequently in different positions.

At present, many books are based on (or rely on) this idea of patterns, and this will be one of them. At the risk of repeating myself, it is a question of choosing the best examples, the clearest and the most correct, and in this way making the pattern 'unforgettable' (in the literal sense of the word). Every time I see a better example (and this judgment is inevitably subjective), I replace the old example, although I understand that this way of working is never-ending and that there must be a more efficient way.

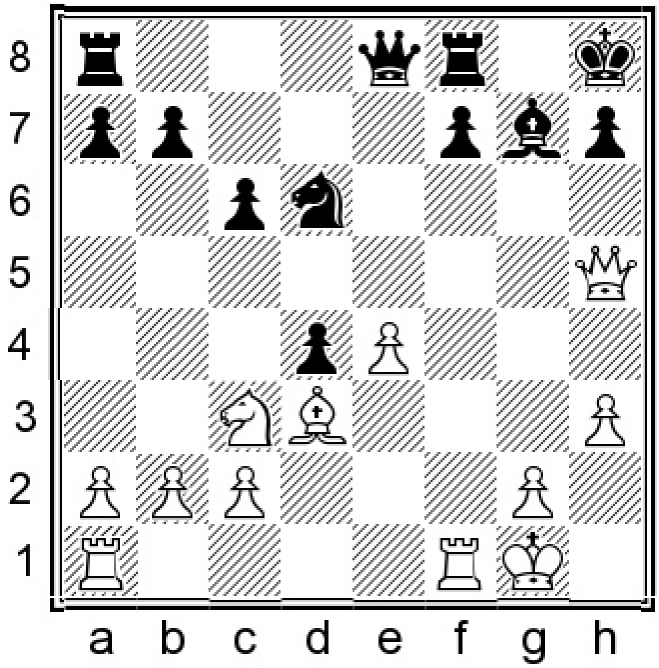
Many patterns are discovered during play, and for the observant and self-critical player these are the ones which stick more firmly in the memory. However, the patterns that we encounter while playing are not all there are, and sometimes they are unclear and require a certain amount of analytical work, in order for us to identify them and understand them.

For this reason it becomes necessary to take note of other players' games and to analyse them with the same interest as we do our own. And therefore one aspect of a trainer's work, perhaps the most important aspect, is to recognise patterns and to find the best examples in order to present them; a pattern introduced by means of an excellent example is more likely to be assimilated and remembered.

Let us now reflect on these ideas with some practical examples.

The following game by Bobby Fischer created a type of combination which occurs from time to time, and it has been very popular since then. Perhaps without it many other combinations would not have been produced.

Bobby Fischer
Pal Benko
New York ch-USA 1963 (10)



White to move

In this position, Benko (one of the best players in the world at the time) was expecting 19.e5, which he planned to answer with 19...f5, and the game would continue. But Fischer now played one of the most famous moves of his career:

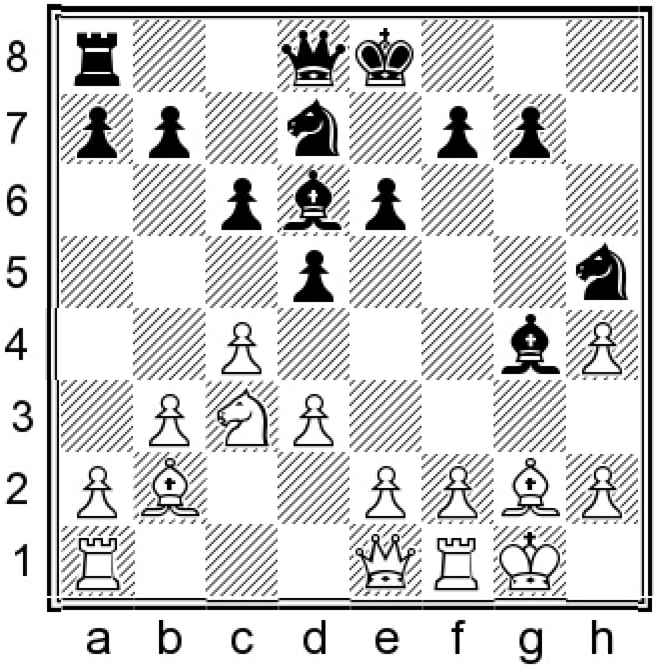
19.♖f6!!

Benko could have resigned here, but he tried a few more moves:

19...♔g8 20.e5 h6 21.♘e2! 1-0

But this finish by the Cuban player Otero is even more elegant:

Jorge Marcos Gomez Sanchez 2430
Diasmany Otero Acosta 2438
Santa Clara 2017 (4)



Black to move

Of course White, who had just played 12.♕e1, was also expecting 12...♕xh4, which he would have answered with 13.f4 (like Benko), and the game would continue.

12...♗f3!!

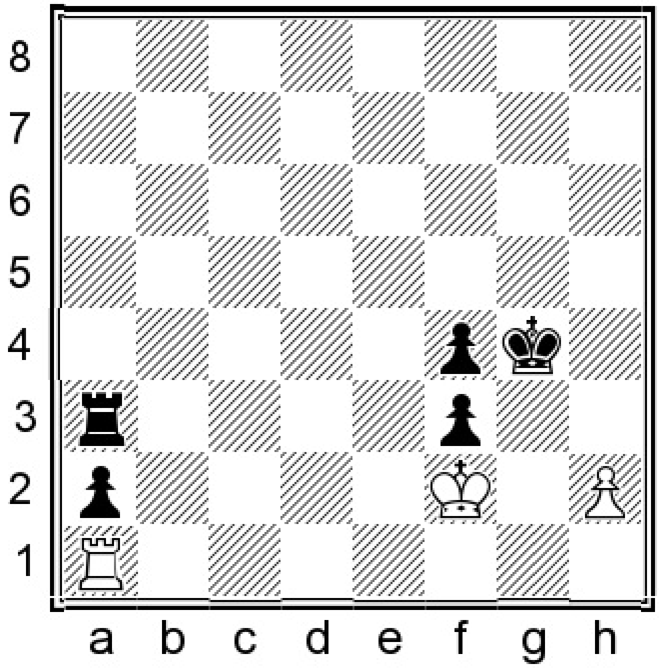
And here too White tried to resist a bit longer. Resigning on the twelfth move, after such a brilliant move, is a rather difficult step to take.

13.♗c1 ♕xh4 14.h3 ♘f4 15.♗xf3 ♕xh3 0-1

And it will be mate in two in any case. But of course it is almost certain that Diasmany Otero was familiar with Fischer's game and it is even possible that it did not take him very long to find the move.

And now, a couple of the author's own experiences in the endgame, with very contrasting outcomes.

Roberto Garcia Lafuente
Jesus de la Villa
Barcelona 1975



Black to move

I well remember that on that day I was rushing, for reasons unconnected with chess, essentially down to my lack of experience, since one should never rush. In the game, everything had been going swimmingly and now all that was needed was to bring home the point. White's rook is completely immobilised in front of the imposing pawn on the second rank. It was very simple; all it needed was for me to bring the king across to the queenside.

62...♔h3 63.♔g1!

My opponent plays hard to get, defending the pawn.

63...f2+ 64.♔f1 ♔xh2??

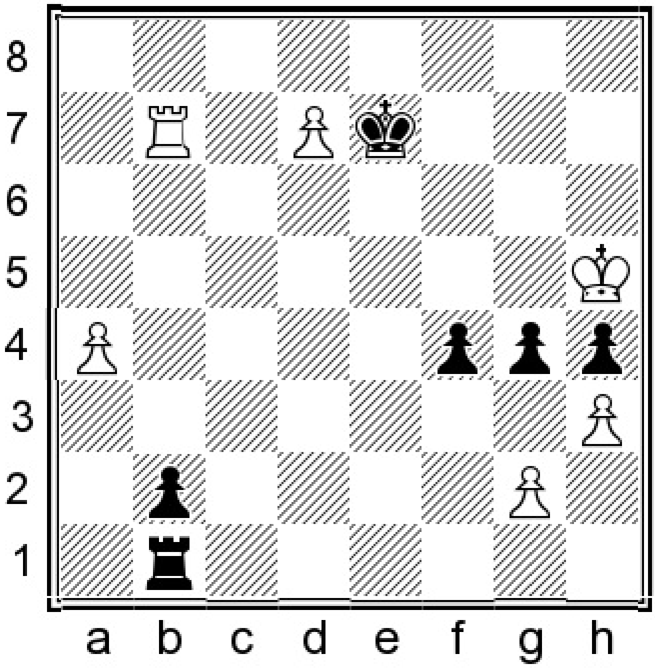
White has no pawns and his king can hardly move, but at the time I had not taken in this clue.

65.♖xa2! ♖f3 66.♖a8

Draw.

And now, the positive experience:

Roman Bordell
Jesus de la Villa
Sitges 1990



White to move

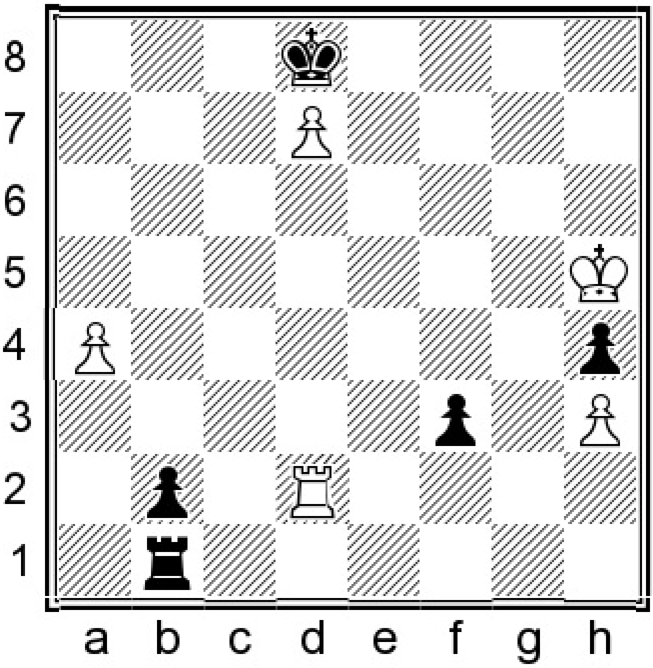
The game is analysed in **Pattern 77**, Vancura. Here we are just going to reflect on the knowledge of patterns. My opponent thought for a long time and after much strolling up and down I returned to the board and saw that he had moved:

55.♖b3!?

I had not foreseen this move, which at first sight looks pointless. By chance, I was already familiar with the Vancura position and seemingly it was still fresh in my mind. I immediately guessed his ingenious idea and quickly neutralised it with:

55...♔d8!

There were other winning moves, although not the impatient 55...f3? 56.gxf3 gxf3 57.♖d3 ♔d8 58.♖d2



analysis diagram

and both Black’s passed pawns are held up by the white rook – a brilliant version of the Vancura idea.

56.a5 f3 57.gxf3 gxh3 58.a6 h2 59.a7 ♖a1 60.♖xb2 h1=♕ 0-1

I wanted to use my own experience as an example, because I am much more certain that that is what I was thinking at the time, but I could have chosen games by other players as an example. Without going any further, the reader can now check the final example of **Pattern 12**, the Staunton-Williams game, and he will suspect as I do that Staunton was not familiar with the pattern of diagonal opposition.

So, knowing the pattern is essential. Sometimes you will be able to find the right idea without it, but on many more occasions you will not manage it. Some patterns are very well known (for example, players quickly learn that two pawns on the sixth rank beat a rook, if no other piece intervenes); others are less well known, even some very common ones, just because we have not come across them with an inspirational example. After the chapter on the distinctive features of the endgame, we shall begin to study the 100 patterns which I have chosen because I consider them to be the most important.

The choice of patterns and their presentation

Well then: which patterns should we choose? Which patterns should we study? How many patterns are there?

These questions have an answer, although it might not be a categorical one. As regards which ones to study, that is the easiest: all the ones you come across and which you can identify as recognisable in different positions.

The job of gathering material and deciding which to present has understandably been much harder than what was required for the book on theoretical endings. Some have been left out, while others needed more than one section in order to explain all their aspects (or at least the most important aspects, from my point of view). One hundred is neither such a large number that it can encompass all the ideas that exist in endgames, nor such a low one that it leaves most of them out. Finally, I think it is sufficiently flexible for the chosen field (endgames with one piece, as I shall explain at a later stage) and it allows the collection of 'almost all the important material'.

Having finished the work, I feel that I have been able to include all the material I had in mind, and I think that the reader, after studying it, will be much better equipped for playing simple positions. In *100 Endgames You Must Know*, there were already some situations which can be considered to be patterns; some of these I have now left out of this selection, because I do not think it would be possible to add much to what is presented there, but other patterns will appear and some of them more than once, depending on the pieces involved.

Amongst the patterns studied, some are basically tactical, others more strategic; some are very concrete and others more abstract; but I think they all have one distinguishing feature: they are easily recognisable when they appear in a practical game. Each section will present one pattern, with a few examples. I am convinced that one excellent example can be sufficient, provided it is able to make a big enough impact. But those perfect examples do not always exist, or else I have not been able to find them. For that reason, there are always at least two examples; at least one of these tries to be very simple, in order to introduce the idea, and then there follow a few more complicated ones, which can reinforce the idea, or introduce variations on the theme.

Nonetheless, in practice it is unusual for an endgame to be based on just one idea; perhaps one theme stands out more, but there are many more in the background. Inevitably in most of the examples more than one pattern will appear, although in each case we shall highlight the pattern featured in that section.

For a pattern to be well understood, it is preferable for the analysis not to be too complicated. Of course it is useful to be aware of the truth about a position, and sometimes that necessitates a very complex analysis, in which it is difficult to separate out the simple elements underpinning it. Even so, I have tried to give every position a clear evaluation, analysing some of them more deeply. But in a few patterns (especially numbers 75 and 76) I have decided not to pursue some variations to exhaustion.

In some cases, within one pattern another one will appear, which has not yet been studied. This is also almost impossible to avoid and it is what often happens in practice: we find ourselves faced with patterns we do not yet know. The curious reader can jump forward at this point and study that pattern, if he so wishes. What is definitely recommended is to go over the patterns for at least a second time, at some point after having finished the book.

As for the order of the chapters, I have decided to arrange them in increasing order of strength of the material: beginning with pawns, next pieces against pawns, then minor pieces and finally major pieces. Somehow it attracted me to see how patterns more typical of the middlegame were appearing, and how the part played by the king was declining, an aspect I hope readers will also enjoy.

Finally, I want to comment on another important decision. In a few cases, some patterns are studied in only one chapter, i.e. in one type of endgame, although they are not exclusive to that endgame; for example the highway theme, studied under bishops of the same colour, could also appear in bishop vs knight and in rook vs bishop. I could have repeated it in each of these chapters, with different examples, but I chose not to do so, because I felt it added little to the topic. With other patterns I did decide to repeat the theme, but only when I considered that it had different connotations; this was another subjective decision, which may not always have been the best one. One example of a theme which I could repeat is the great detour in knight vs bishop endings, but it seems to me that the concept is exactly the same. In contrast, I have repeated the stalemate theme in both rook endings and queen endings, because typical and very different constructions appear.

Selection of material

I shall move on now to make some comments on the selection of material, not only to explain or justify the system I have followed in putting this book together, but also to discuss the usefulness of some choices and ultimately to convince readers that it is possible to learn something, not only from the games of famous players, but from any position, and to encourage them to look for lessons in their own games, or in those of players of the same level.

First of all, there is the decision between recent material or classical material. Naturally I believe it is better to present recent material, because the classical material has already been published, sometimes on many occasions, in other books. Furthermore, presenting recent material reinforces the idea that patterns are something ‘live’, which can arise in ‘real’ games. However, there are a number of classical examples which I have not been able to replace with recent ones that are also better. Perhaps this is influenced by the fact that these examples are the ones that I have always identified with the basic pattern, and therefore it is more difficult for me to find substitutes; in any case, all of them are analysed with the ‘vigilance’ of the latest analysis engines.

The second big decision is between choosing only high-level material, or including material from amateur games. I believe that it is best to choose both kinds of examples, and this is what I have done with almost all the patterns. This book is not about considering the merit or usefulness of a game extract perfectly played by one of the players, but about incorporating new patterns in our repertoire, or acquiring a better understanding of the ones we already know. In this regard, error is something fundamental and the ‘frequent error’, in other words the one that often occurs in certain types of position, is hugely instructive. For that reason, I think that analysing amateurs’ games allows us to have a better appreciation of the eminently practical aspect of this way of studying chess, and if these games are correctly analysed (as I hope is the case) they allow us to see what were the correct moves at each point. We might say that ‘the errors we have made are not important, what matters is knowing which they were’.

Another decision is between positions from real games or composed positions. As I have already pointed out in my *100 Endgames You Must Know WORKBOOK*, I prefer to limit composed studies to the minimum possible, not because I am unaware of their beauty or their ability to present an idea brilliantly, but because I think that in some way studying a pattern is more justified if it arises in practice, and if it occurs frequently there should be good examples from real games; but here again I have not always been able to find them. So the result is that I have included just a few studies, both in the descriptive part and in the exercises. Regarding composed studies, I favour the simple ones, those which illustrate a single idea. The more complex ones serve another purpose.

Evaluating positions and symbols of evaluation

For years now, punctuation marks and evaluation symbols have been used to be able to convey the correctness of the course of a game and its trend in favour of one side or the other, without our having constantly to get bogged down in long explanations. Although this ‘system of symbols’ was invented and developed at a time when analysis engines did not exist, and although it is essentially imprecise (which is most evident in the evaluation of endgames), it is still the system that is best adapted to human thought. I suspect that we are seeing it in its last throes and that it will soon be abandoned and replaced by something else, but for the moment I am not going to ignore it.

I prefer to dedicate a few lines to explaining my own criteria in the use of symbols, instead of limiting it to a short section without words. I have often used some traditional symbols from the *Chess Informant*, especially the ones used for a decisive advantage (+− for White and −+ for Black), as well as the symbol for equality, =.

I haven’t used the symbols for a slight advantage (± or ∓), because I think that they have little meaning in an endgame; the ideal is to be able to arrive at a definitive evaluation. It is therefore only in variations which are not main ones that I have allowed myself to abstain from an exhaustive analysis and instead make an evaluation that we could call imprecise or approximate.

As for punctuation marks (!, ?, etc.), I think that the only important one is the question mark (?) which should indicate that this is a move which endangers the correct result of the position. In second place would be the exclamation mark (!) which objectively should indicate the only winning move (or one of the few), but which I have used sometimes in the much more subjective sense of the middlegame, to indicate a move that is good but not obvious. I have used the ?! symbol to indicate a move that does not endanger the result but makes the task more difficult, which is a subjective evaluation. And I would say that the other symbols are not important in this type of book, although I have sometimes ‘punished’ a move with ??, when the error is very blatant and perhaps caught me in a bad mood. And a few times I have rewarded moves that have impressed me with !!, although this is always a subjective judgment.

How to study endgames

In recent years I have frequently been asked about how to study endgames. Of course, this question could be asked about any aspect of chess and the answers will often have elements in common.

In any case I shall try to suggest some useful approaches, consistent with the focus of this book and in which I shall reiterate some of the ideas already outlined.

One prerequisite to improving endgame play is an attitude of constant curiosity. This is useful for everything, but as the study of endgames has a reputation of being dry, it is a little more difficult to achieve it. Curiosity must be applied to the study of any book or game. A player should be constantly prepared to ask himself all kinds of questions about what will happen or what could happen if there should be a slight variation from the game continuation. Approaching our own games in this way is fundamental, although it seems easier; we could say that if we have no curiosity about what should have happened in one of our endgames, then our progress will be slow at best, too slow to be of use.

We should extend this curiosity to any position we come across along the way, especially to rapid games. Some of my students look at me with horror when I talk about this: ‘do we really have to study our quick-play games as well?’ But we must not be frightened by the mountain of work which awaits us. We do not have to study our rapid games; we have to study the interesting positions that arise in our rapid games, which naturally are not that many, and we should do so because we have a greater ‘link of curiosity’ with them than with others. Every time we come across something we do not understand, whether it is a theoretical endgame or an interesting pattern situation, if we work at deciphering it, very soon we shall have a huge stock of knowledge, which will turn into resources that we shall be able to exploit.

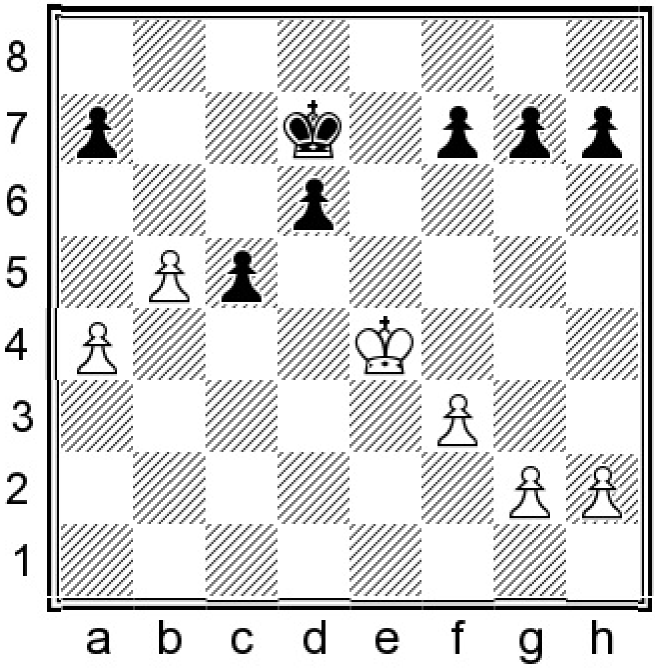
As for the order, studying theoretical endgames first is the most logical, because otherwise unanswered questions will endlessly arise in other endgames. The most common are absolutely essential, then the rest can be added more slowly, and at the same time as practical patterns are being studied. And after they have read this book, I believe that all readers will be prepared to recognise (or to think they recognise) new patterns in their games, if they did not already do so before, as well as using and perfecting the ones they have already studied, of course.

How often in our games does a theoretical ending arise and how often do we see a typical pattern in an ending with one or two pieces? It depends on many things, but one of the most important is how well we know them; the more of them we know, the less often they arise for us. How can that be? Well, very easily: as both players become acquainted with the theoretical result of a position, it is usual for one of them to avoid it, if there are alternatives. The same thing will happen with typical patterns, but as they are much less concrete, and as they require a higher level of knowledge, they will be avoided far fewer times and therefore they will arise much more often. Try playing a few dozen games against beginners and you will certainly manage to profit from endgame knowledge which you will not be able to apply in games against players of your own level. How many games by elite players do you see with typical well-known mating combinations? Relatively few, as both players know them. And this search for complexity extends also to strategy and to the study of openings.

Over the last few months I have put this question to myself regarding this book’s theme of patterns, and I decided upon two areas of material to study: games from the tournaments which I was following on an almost daily basis and my own fast games online (it should be understood that this book was written during ‘lockdown’, although it is not that I am very active now in any case). Would those patterns arise in these two sets of test material? They did so to a greater extent than I was expecting: some of the games from this period have their place in the book and, as regards my own fast games, I would say that of every twenty games, at least one would be relevant to one of the patterns (even today, the very day when I am writing these words), although of course I will not be so boring as to present them all.

The following extract is from a game which was played on the day I was writing this (and the whole game can be found online).

Algernoon 2428
Ngazio2000 2441
Lichess.org blitz 2020



Black, with an impressive pair of passed pawns, could have suspected the danger of the creation of a high-quality majority by White (see **Pattern 3**). He could have prevented it with 35...a6! and if 36.b6 a5!–+.

Instead he played 35...♔c7? and after 36.a5! the high-quality majority appears and a draw is inevitable: ½-½.

So the best advice I can give is to analyse everything and try to draw meaningful conclusions, in order to be able to apply them in the future.

The ability to see interesting ideas is developed by playing and by solving exercises. Do not waste any collection of puzzles you come across by looking at the solution straight away. That would be like trying to improve our tennis serves and strokes by watching videos, but not putting them to the test until we get to the decisive game. Each exercise solved is a source of satisfaction, and each exercise analysed in depth is a greater source of learning.

Chapter 1
Pawn endings

As we have already outlined in the general introduction, we are starting with positions with less material, in this case pawn endings. It is natural to start with these, because other endgames can turn into pawn endings at some point, whereas although pawn endings can sometimes turn into queen endings, they almost never turn into other types of ending.

In pawn endings, with practice we quickly come across extremely clear patterns, some of them strategic in kind, like the distant passed pawn, and others which are pure piece configurations, like the mate with two pawns on the seventh rank.

Many of these patterns give us a foretaste of ones we shall see later with more pieces. For example, the king which cannot enter (**Pattern 3**) is the forerunner of fortresses, which become more and more impressive in later chapters and really begin to resemble medieval castles, when one of the players has the queen.

Pawn endings occur much more frequently in the games of very young players, as they have a natural tendency to exchange pieces, without knowing the theoretical result of the positions they are heading towards. That is why it is essential for them to know and master all these patterns, before progressing to the other types of ending. A developing player who does not know pawn endings will be severely punished for it in the form of points lost.

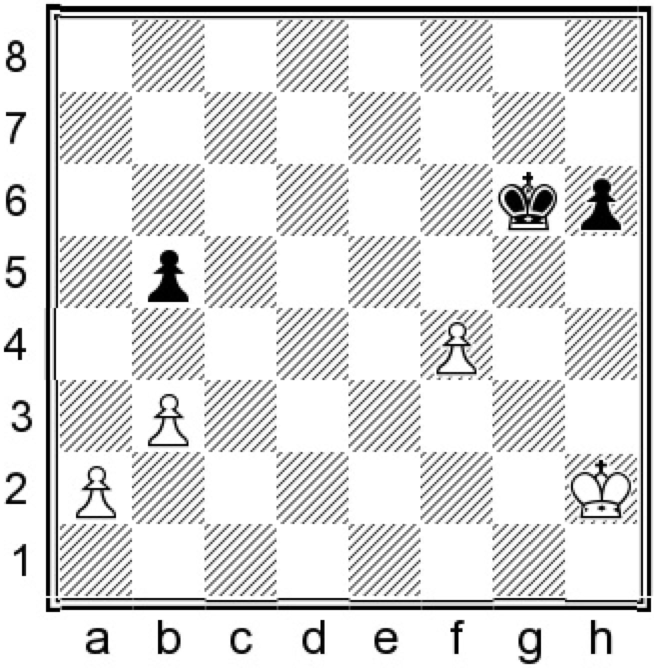
Finally, it is important to remember that practical pawn endings are an excellent source of training material for learning to calculate, and we shall quickly discover that it is much more difficult to calculate well if we do not know the patterns.

Pattern 1 The distant passed pawn

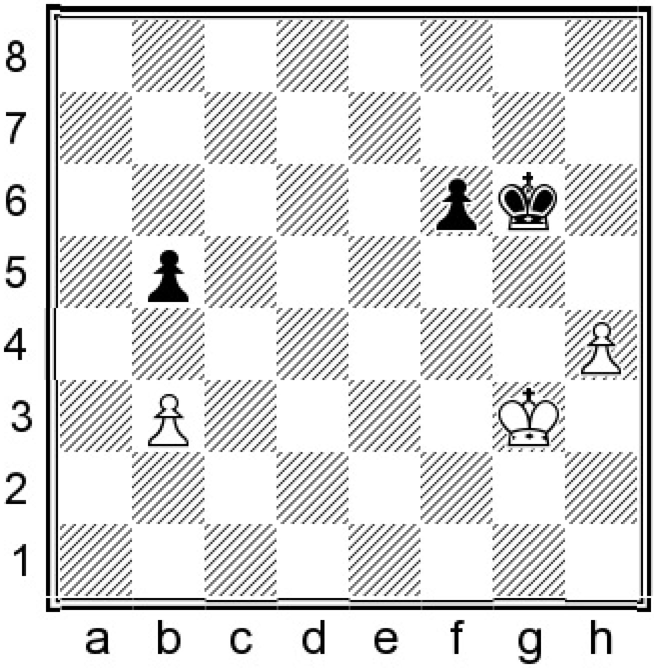
The *distant passed pawn* (also known as *outside passed pawn*) is important in various kinds of endgames, but above all in pawn endings. This is so for three reasons: its frequency, its strong influence on the outcome, and the ease with which it can be exploited. While it is just an advantage in other endgames (and not in all of them), in pawn endings it is usual for the distant passed pawn to win the game; it can even win with a disadvantage in the number of pawns. The reason is very easy to understand: the king is the only piece that can deal with it, and to do so he has to travel a long distance. As a consequence of moving his king so far away, the player loses all his pawns on the other wing.

Let us start with a series of three very similar schematic positions:

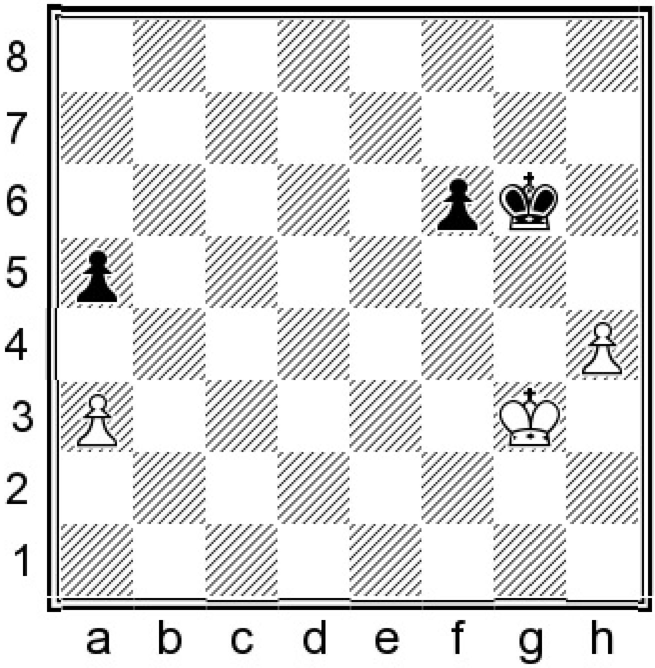
Series: Distant passed pawn



Position 1



Position 2



Position 3

In the first position we encounter two themes. Black (who is a pawn down) wins with a two-step mechanism: first of all he converts his only queenside pawn into *a pawn that holds two*; then he exploits the advantage of his distant passed pawn to be the first to reach the queenside and capture the pawns, which he achieves by a single tempo:

1...b4! 2.♔g2 ♔f5 3.♔f3 Now that White's two queenside pawns have been neutralised, Black mobilises his distant passed pawn: **3...h5! 4.♔g3** Now the owner of the distant passed pawn has to calculate in order to exploit the advantage. Normally, exchanging the pawns wins (except in those cases where the stronger side has only a rook's pawn left on the other wing). **4...h4+ 5.♔xh4 ♔xf4** This is the interesting position to observe. As a result of the exchange of the two passed pawns (which the side with the most distant pawn can always force), the black king ends up nearer the white pawns on the queenside and is able to capture them: **6.♔h5 ♔e3 7.♔g5 ♔d3 8.♔f5 ♔c3 9.♔e5 ♔b2 10.♔d4 ♔xa2 11.♔c4 ♔a3** Capturing the second pawn and winning. Notice that the black king has arrived first by a single tempo, so one should not expect to win automatically and it is normally appropriate to verify it through calculation.

In the second position, it is White who wins, even without an extra pawn, because now it is White who has the distant passed pawn: **1...b4** With 1...♔f5 Black can try to prevent the exchange of pawns, but he will not succeed: 2.b4 ♔e5 (2...♔g6 3.♔f4+–; 2...♔e4 3.h5 f5 4.h6 f4+ 5.♔f2+–) 3.h5! ♔f5 4.♔h4!. White definitely needs to be careful to make sure that the pawns are exchanged and that he doesn't just lose his distant passed pawn. But with this move White wins: 4...♔e6 5.♔g4 ♔f7 6.♔f5 ♔g7 7.h6+ ♔xh6 8.♔xf6+–.

1...b4 2.♔g4 f5+ 3.♔f4 ♔h5 4.♔xf5 ♔xh4 Now the white king is the one nearer to the queenside.

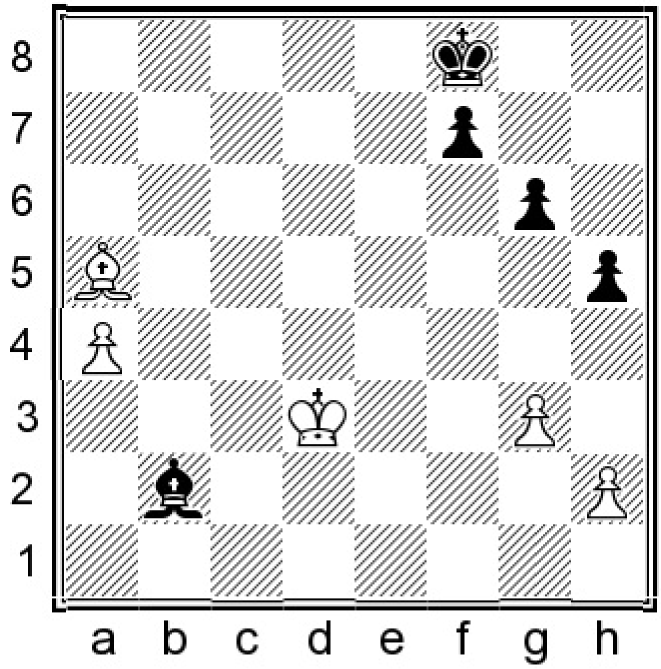
5.♔e4 ♔g5 6.♔d4 ♔f6 7.♔c4 ♔e6 8.♔xb4 White captures the pawn and now after **8...♔d6 9.♔b5!+–** he occupies one of the critical squares for promoting the pawn.

Finally, in the third position, where the only difference from the second one is that the queenside pawns have been moved to the rook's file, White does not win, because although he reaches the queenside first and captures the a-pawn, this results in a drawn ending, as can easily be verified. So it is worth noting that if there is only a rook's pawn left on the other wing, the distant passed pawn might not be enough to win.

These positions have been schematic, but in practice the winning mechanism of the distant passed pawn has been applied on innumerable occasions, and at all levels. We shall present three very famous examples.

The first shows the mechanism in its most basic form:

Bobby Fischer
Bent Larsen
Denver 1971 (m/5)



White to move

39.♗c3!

White forces the transition to a pawn ending, which is winning, due to the distant passed pawn.

39...♗xc3

Black has no choice and continues to play through inertia. If 39...♗a3 then 40.a5 and there is now no way to stop the pawn without losing the bishop: 40...♗c5 41.♗d4+–.

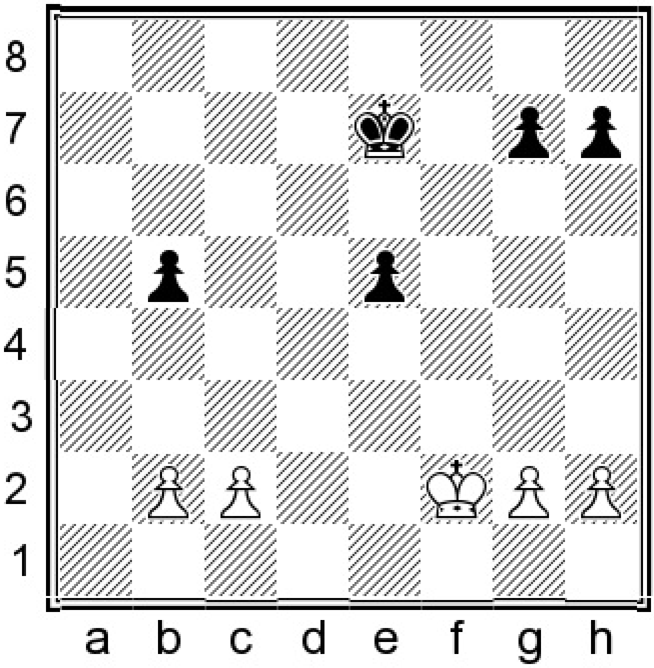
40.♔xc3 ♔e7

The black king has entered the square of the a-pawn but in order to capture it he will have to leave all the kingside pawns to their fate.

41.♔d4 ♔d6 42.a5 f6 43.a6 ♔c6 44.a7 ♔b7 45.♔d5 h4 46.♔e6 1-0

In the following example, the loser of the previous ending is the one who exploits the theme.

Bent Larsen
Svetozar Gligoric
Moscow ol 1956 (5)



White to move

31.♔e3

White's plan is quite simple. First he centralises the king, to prevent any surprises and to tie the black king to the defence of the isolated pawn on e5. Next he advances his majority on the queenside to transform it into a distant passed pawn. Then he advances this pawn and finally exploits the (forced) absence of the black king to capture all Black's kingside pawns. Although some care is required, the plan works like clockwork.

31...♔d6 32.♔e4

The first stage: White ties the black king to the defence of his weak pawn. It is understandable that with his next move Black tries to disrupt the natural course of events:

32...b4!?

32...♔e6?! simply facilitates the execution of the plan: 33.c3 ♔d6 34.b3 ♔e6 35.h4 h5 36.g3 g6 37.c4 bxc4?! (with the exchange of pawns, White's queenside pawn finally becomes a distant passed pawn. 37...b4 prevents the creation of a distant passed pawn, but the pawn on b4 is easily captured, e.g. 38.c5 ♔f6 39.c6 ♔e6 40.c7 ♔d7 41.♔xe5 ♔xc7 42.♔d5 ♔b6 43.♔c4 ♔a5 44.♔c5+–) 38.bxc4 ♔d6 39.c5+ ♔xc5 40.♔xe5 and White captures both pawns.

33.c3 b3!?

This situation is interesting. The presence of the pawns on b2 and b3 means that the c3-pawn is not a 'classic' distant passed pawn, because the black b-pawn is very close to the promotion square after the c-pawn moves and is captured. The problem for Black now is that the white king is better placed and the pawn on b3 is very exposed. By manoeuvring correctly White will always be able to capture it.

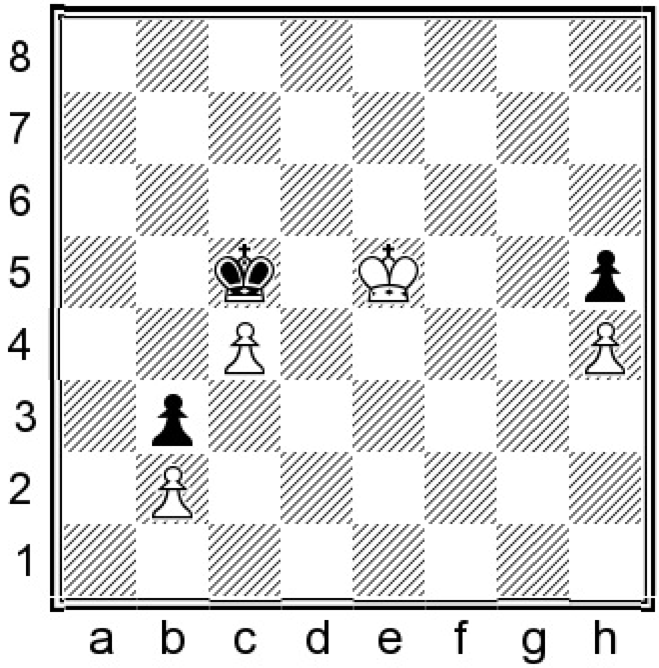
34.c4 g6 35.g4 h5 36.gxh5 gxh5 37.h4!

Black is in zugzwang, but it is vital not to allow the black h-pawn to advance any further, as will be seen in the subsequent variations.

37...♔c6

37...♔c5 38.♔xe5 reaches the same position as at move 42 in the main variation: 38...♔xc4 39.♔e4! ♔c5 40.♔d3 ♔b4 41.♔d4 ♔a4 42.♔c3 ♔a5 43.♔xb3 ♔b5 44.♔c3 ♔c5 45.♔d3! (it is essential to give up the b-pawn as far away as possible from the critical f7-square) 45...♔b4 46.♔e4 ♔b3 47.♔f5 ♔xb2 48.♔g5 ♔c3 49.♔xh5 ♔d4 50.♔g6 ♔e5+–. The black king does not reach f7; but if it had done so, White would have advanced his b-pawn.

38.♔xe5 ♔c5



39.♔f5!

White manoeuvres to lose a tempo, applying the mechanism known as *triangulation*. 39.♔e4? ♔xc4 40.♔e3 ♔d5 41.♔d3 ♔e5 42.♔c3 ♔f4 43.♔xb3 ♔g4 44.♔c4 ♔xh4=.

39...♔d4 40.♔f4! ♔c5 41.♔e5 ♔xc4 42.♔e4

It was essential to bring about this position with Black to move.

42...♔c5 43.♔d3 ♔d5

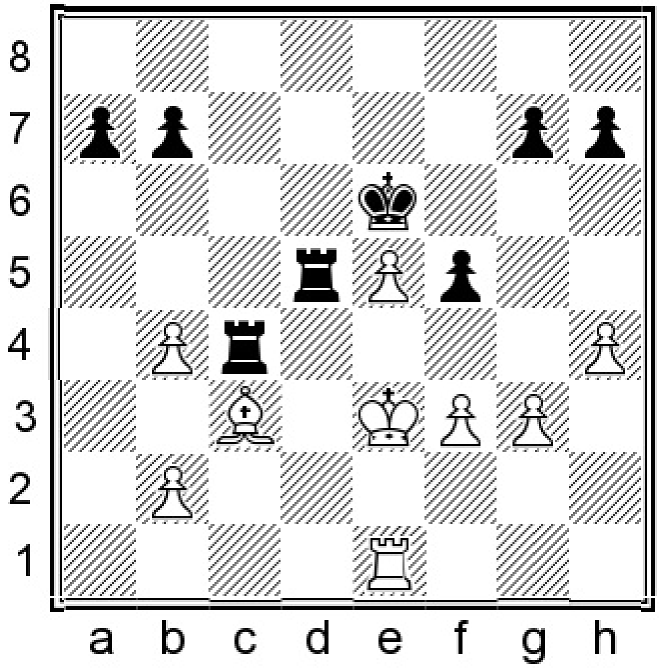
43...♔b4 44.♔d4 ♔a4 45.♔c3 ♔a5 46.♔xb3 ♔b5 reaches an ending known to theory as winning.

44.♔c3 ♔e4 45.♔xb3 ♔f5 46.♔c3 1-0

The black pawn reaches only as far as h3.

A final example, which is also a classic:

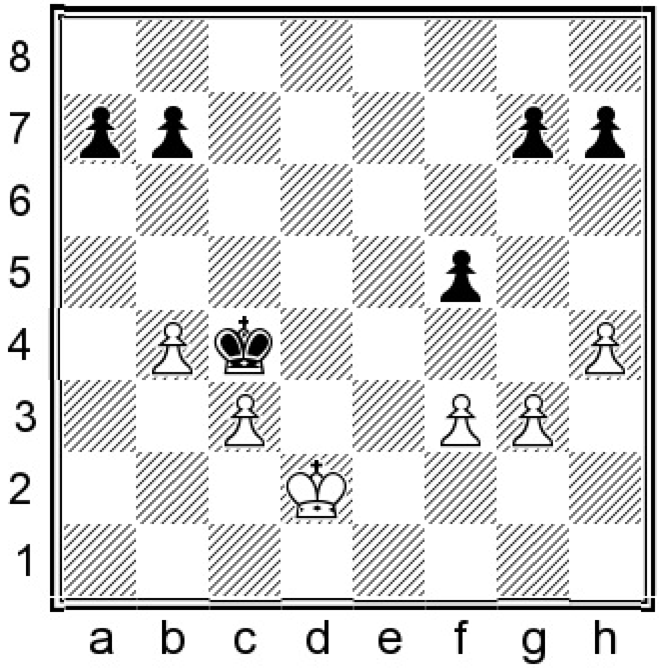
William Lombardy
Bobby Fischer
New York 1960 (2)



Black to move

Naturally Black has many ways to win, but the following simplifying line, leading to the pattern of the distant passed pawn, is very easy:

30...♖xc3+! 31.bxc3 ♖xe5+ 32.♔d2 ♖xe1 33.♔xe1 ♔d5! 34.♔d2 ♔c4



With the *dominant king*, Black will be able to create a distant passed pawn whenever he wants.

35.h5 b6 36.♔c2 g5 37.h6 f4 38.g4 a5!

The moment has arrived.

39.bxa5 bxa5 40.♔b2 a4 41.♔a3 ♔xc3 42.♔xa4 ♔d4 43.♔b4 ♔e3 0-1

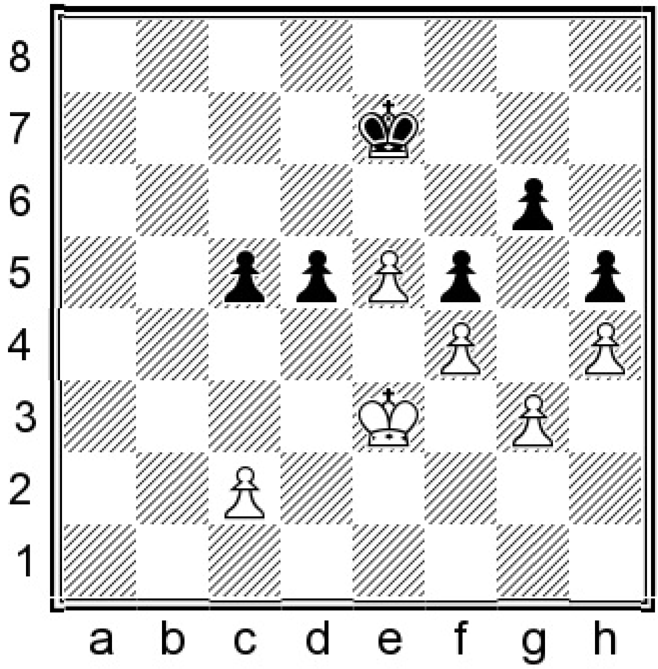
And as usual all the white pawns will be lost.

Pattern 2 The protected passed pawn

The *protected passed pawn* is a particular case of the *high-quality majority*, which we shall study in the next section. Specifically it is the most obvious case of an unassailable majority, but it is very common and deserves a separate section.

Its virtues lie in the fact that the enemy king is obliged to keep an eye on it, losing mobility thereby; and yet the king can never capture it. But the apparent simplicity of this situation often induces a sort of hypnosis in the player, as we shall see in a few examples. We shall therefore try to present it with all its virtues and all its limitations, which are often overlooked when first approaching this theme.

Dmitrij Jakovenko 2506
Varuzhan Akobian 2438
Yerevan Wch U20 2000 (2)



White to move

This position is a good illustration of the advantage of the protected passed pawn. The white king has much greater freedom and can try ‘everything’ to break the opponent’s resistance. Black’s king is restricted in its movements and the result depends on whether that restriction will lead to damage to his position.

46.♔d3

In this case the white king can only enter via the queenside and Black's weaknesses are not abandoned to their fate, as in many other cases.

46...♔d7 47.♔c3 ♔c7 48.♔b3 ♔c6 49.♔a4 d4

49...♔b6 would cover the entrance and force White to play his last card: the sacrifice of the protected passed pawn to divert the black king, which in this case wins: 50.e6! ♔c6 51.e7 ♔d7 52.♔b5 ♔xe7 53.♔xc5 ♔e6 54.c3, and Black loses one pawn now and the rest soon after.

50.♔a5 ♔d5 51.♔b5 c4 52.e6

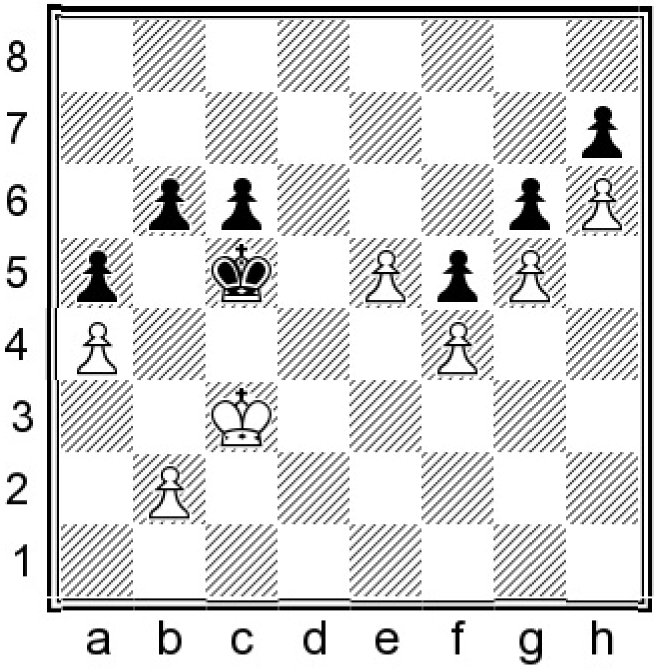
This is quite similar to the variation in the previous note.

52...d3 53.e7 1-0

After the pawn queens there is mate on e5.

By way of contrast, in the following example, the protected passed pawn is not enough to win, although White can try various options and compel Black to defend precisely.

Jan Votava 2505
Pavel Simacek 2442
Czechia tt 2003/04



White to move

White has spent the last twenty moves going round and round to confuse his opponent. But finally, since his king has no way through and his opponent is not going to move his pawns, he decides to try the only possible pawn break:

61.b4+!? axb4+ 62.♔b3 ♔d5 63.♔xb4 ♔e6 64.a5

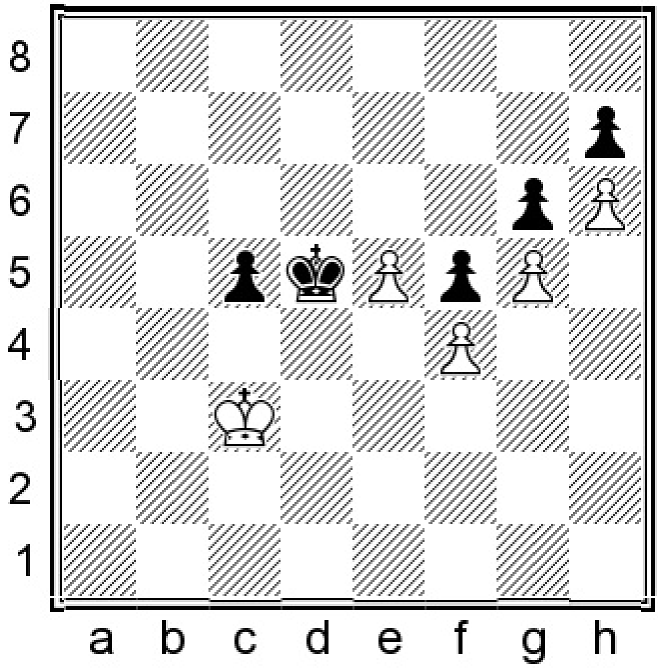
There is not much point in manoeuvring with the king now. White will always have to play a4-a5 and then recapture with the king.

64...bxa5+ 65.♔xa5 ♔d5 66.♔b4 c5+

This move and the next are necessary, otherwise the white king would win the isolated c-pawn and then support the promotion of his own pawn.

67.♔c3

Instead, 67.♔b5 c4 68.♔b4 ♔d4 would lead to a drawn queen ending.



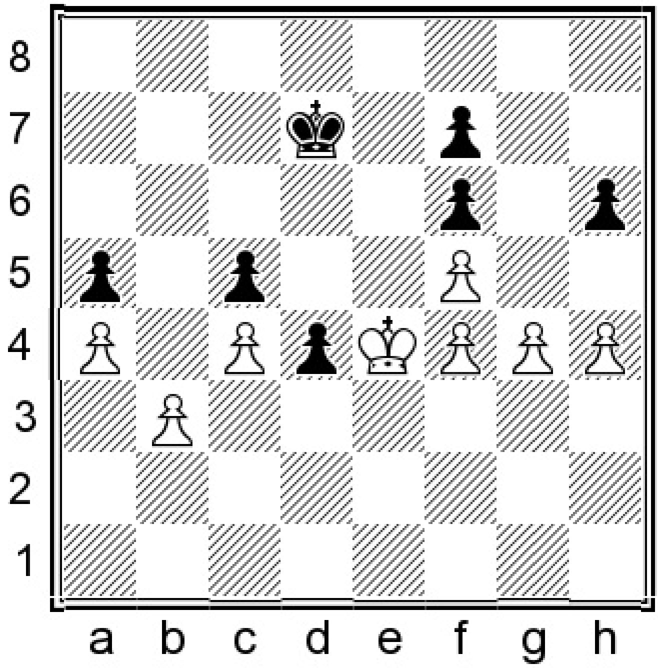
67...c4!

This move is necessary to be able to maintain the defence of the pawn. Now the natural continuation would have been 68.♔c2 ♔e6 69.♔c3 ♔d5 and Black can keep the pawn defended without leaving the square of the e-pawn. In such cases, the only thing left to try is the exchange of the proud passed pawn for the isolated one; here that would mean 70.e6, but after 70...♔xe6 71.♔c4 ♔f7 the black king heads for the corner and there is no way to dislodge it from there. It is natural for White to try the queen ending, but it offers no hopes of victory:

68.♔b4 ♔d4 69.e6 c3 70.e7 c2 71.e8=♕ c1=♕ 72.♕d7+ ♔e4 73.♕xh7 ♕d2+ 74.♔b5 ♕d5 75.♔b6 ♕d6+ 76.♔b7 ♕d5+ 77.♔b8 ½-½

The next example shows the limitations of a protected passed pawn. Sometimes its presence makes the pawn structure too rigid.

José Raul Capablanca
Adrian Garcia Conde
Hastings 1919 (9)



White to move

Although the pawn on d4 ties down the white king, it can't do anything else, and it is a useless spectator while his opponent creates two widely separated passed pawns. It is a curious irony that if we placed the proud d4-pawn on c6, converting it into an ugly doubled pawn, the position would be drawn, thanks to the theme of **Pattern 4**, *king entry*.

39.b4!

White has a very good majority on the kingside, which will allow him to create a passed pawn whenever he wants, and with this move he now creates another one on the opposite wing.

39...axb4

This way the white a-pawn is very distant from Black's king although at least Black obtains two passed pawns of his own; but these are too close together of course and the white king can keep an eye on both of them at the same time. 39...cxb4 40.g5 is essentially the same.

40.a5 ♔c7 41.g5!

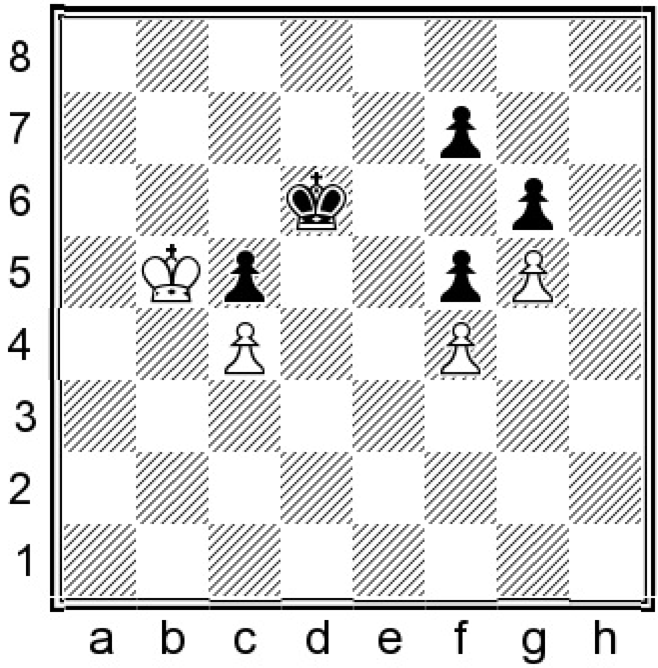
And now White creates the second passed pawn.

41...fxg5 42.fxg5 hxg5 43.hxg5 b3 44.♔d3 ♔d7 45.g6 fxg6 46.fxg6 1-0

The protected passed pawn was a failure and we saw the triumph of *separated passed pawns*, which we will examine in **Pattern 9**.

As we indicated in the introduction to this theme, the prestige of the protected passed pawn is mesmerising, but it does not always win.

Alberto Andres 2304
Jesus de la Villa 2473
Mondariz 1999 (3)



Black to move

50...f6

Black thought that he had been cunning in attracting the white king to the b5-square, since he was counting on this pawn break, which will lead either to the creation of a protected passed pawn, which he though was winning, or to a single unstoppable passed pawn.

51.gxf6 g5

The logical follow-up to the previous move.

52.fxg5?

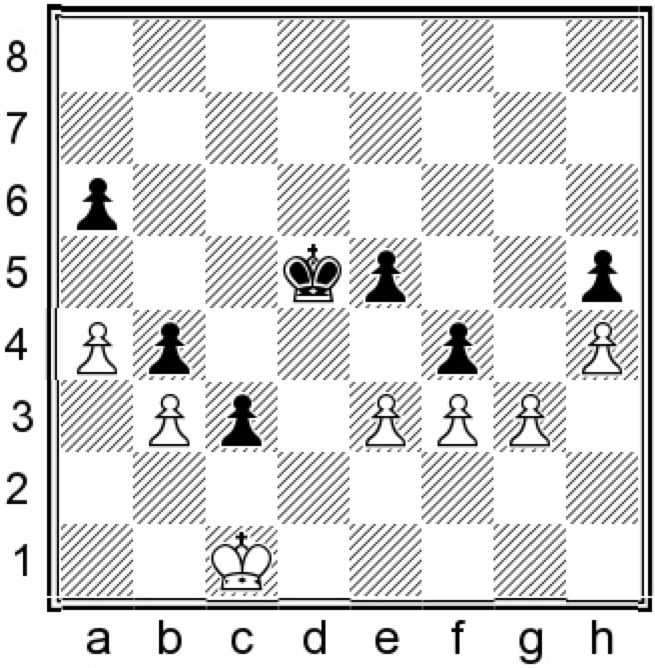
This allows the passed f-pawn to queen unhindered. The interesting thing is that both of us believed that the black position was lost, and we continued to believe this for many years, which would not have been the case in this, the ‘engine age’.

With 52.f7! ♔e7 53.♔xc5 g4 Black gains a protected passed pawn. Nevertheless, victory would elude him, because the white king can defend his own passed pawn without leaving the square of Black’s passed pawn: 54.♔d4 ♔xf7 55.♔d3 ♔e6 56.♔e3 ♔d6 57.♔e2 ♔c5 58.♔d3! and Black can make no progress. 58...♔b4 is possible, but after 59.♔d4 g3 60.♔e3 we reach the ending of king + pawn vs king in a drawn position.

Some other moves also work, but not 57.♔d3?? ♔c5–+ zugzwang.

52...f4 53.g6 ♔e6 54.g7 ♔f7 55.♔xc5 f3 0-1

Pavel Grochowalski 2063
Terry Chapman 2249
London 2010 (4)



White to move

In this position Black already has a protected passed pawn, which restricts the white king. White can also create one, but he either succumbed to the temptation of materialism or else he was careless in his move order and landed in a lost ending:

43.gxf4?

43.e4+! would have led to the creation of a protected passed pawn for White: 43...♔c5 44.gxf4 exf4 45.♔c2, with a draw. Both pawns (c3 and e4) are at the same time both unassailable and immobile.

43.gxf4? e4!

Perhaps this came as a surprise; instead, 43...exf4 would have led to the position in the previous note.

44.fxe4+ ♔xe4 45.♔c2 ♔f5

And White loses, because the black king can capture the pawn on h4 without leaving the square of the f4-pawn. There is little point in lamenting how simple it was; it was essential to have thought it through in advance.

46.♔d3 ♔g4 47.♔c2 ♔xh4

And White resigned.

Pattern 3 The quality of the pawn majorities

As we saw in the previous section, a protected passed pawn has some virtues which other types of passed pawns lack, and sometimes this leads to a decisive advantage. But also we saw that it has its limitations and does not always win.

A number of other pawn configurations have a similar, even at times a better, effect, and can also be an important factor in the outcome of the game. They are almost always pawn majorities, because passed pawns can emerge from these, but sometimes they can be structures which ensure a passed pawn even though there is not a numerical majority.

The main function of majorities is to create a passed pawn. We are going to classify them in the following way:

- Unstoppable majorities: these cannot be destroyed and furthermore they ensure pawn promotion on their own.
- Invulnerable majorities: these simply cannot be destroyed. We can further divide them into: *active*, when they force the enemy king to watch over them, to prevent them from creating an unstoppable passed pawn; and *passive*, when they cannot be destroyed but do not demand the attention of the enemy king.
- Vulnerable majorities: these can be destroyed, either directly by the king, or by means of an earlier pawn break.
- On the other hand, occasionally a majority loses the ability to create a passed pawn, and we generally refer to it as a useless majority, or a devalued majority. However, we are not going to consider these in this section; here we shall only deal with majorities that are capable of creating a passed pawn.

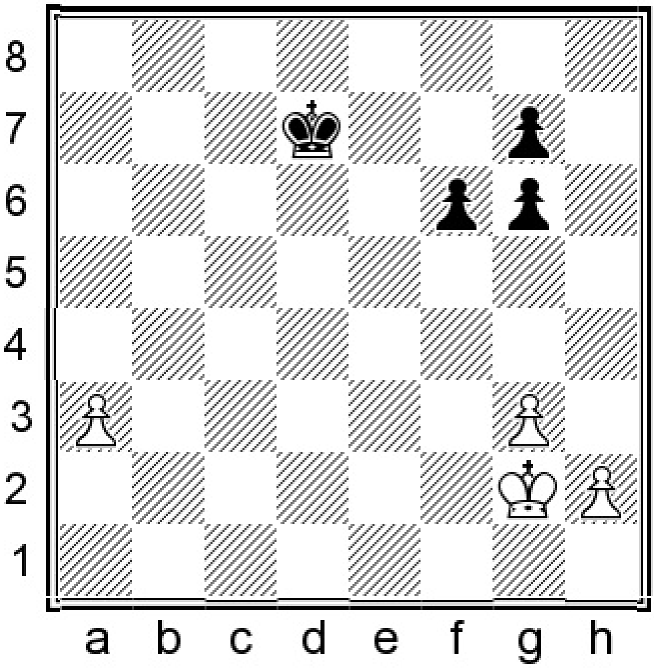
This classification is useful for establishing our plans and ideally we should learn to recognise each type of majority quickly, which can be achieved by analysing a number of examples. In practice there are many cases where both players have majorities which can be improved or destroyed, with varying amounts of work by the king. It is not unusual for the result of such positions in practice to be the opposite of the one arising from a correct analysis.

Having a better-quality majority than the opponent’s, or simply having a majority of a certain quality (which the opponent does not have), can lead to victory.

The configurations of these majorities can vary a great deal, and precisely for that reason we cannot hope to catalogue them all. However, a player should immediately take stock of the quality of his majority, improve it if possible or exploit it if it is already ideal.

In our first example we see a position very similar to the first position in **Pattern 1**.

Leyre Abrisqueta
Juan Labiano
Pamplona 2016



Black to move

This position is very similar to the Fischer-Larsen game in **Pattern 1**. Everything seems to indicate that the distant passed pawn will win easily, but this is not the case. On the contrary, it is a typical scenario in which the quality of the majority has its influence. If Black is aware of this concept, with his first move he can improve the quality of his majority sufficiently to at least force the exchange of the two white pawns.

51...g5!

In the game Black played diffidently: 51...♔c6? 52.♔f3? (52.h4! immediately was necessary) 52...♔b5? 53.h4! ♔a4 54.♔e4 ♔xa3 55.♔d5 ♔b3 56.♔e6 and White won.

51...g5! 52.♔f3

52.g4 holds up the pawns further back but meets the same scenario: 52...g6 53.♔f3 f5 54.gxf5 (54.h3? even loses after 54...f4! 55.h4 gxh4 56.♔xf4 g5+!, once again creating a protected passed pawn – a special case of the *high-quality majority*) 54...gxf5 55.h3 and now a detour by the white king forces a draw: 55...♔c6 56.♔e3 ♔b5 57.♔d4 ♔a4 58.♔e5 f4 59.♔e4 ♔xa3 60.h4=.

52...f5 53.♔e3 g6 54.♔d4 ♔d6 55.a4 ♔c6 56.a5 ♔b5 57.♔e5 ♔xa5

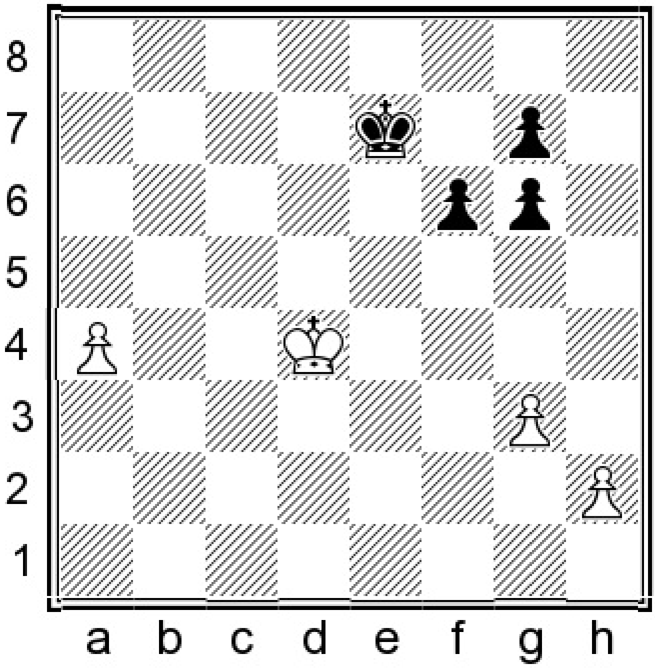
And here White might have discovered that it is not possible to capture the rear pawn of the majority, because then the pair of pawns at the front would create a fast-moving passed pawn.

58.h4!

White must content himself with the destruction of the black majority, at the cost of exchanging all the pawns.

58...gxh4 59.gxh4 ♔b5 60.h5=

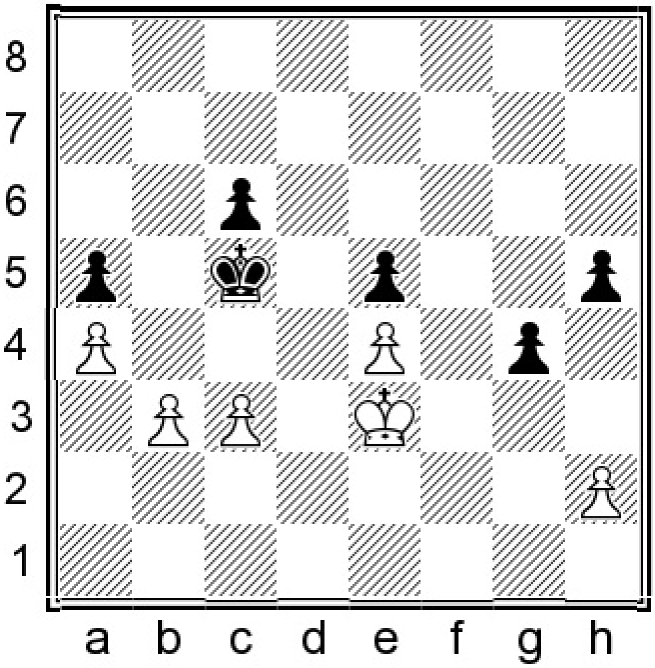
As a complement to this example, let us see what would happen in the position from the Fischer-Larsen game if we reconfigure the black majority in the image of this game.



White would have just played ♔d4, as on move 41 of Fischer-Larsen. Here Black can play ...g6-g5! (1...g5!) and make a draw. Analysing this is a simple but interesting exercise.

In the following example, both players have majorities that can be improved.

Ruben Hernandez
Cristina Ruiz de la Torre
Mondariz 2003



White to move

White has a queenside majority that is unable to advance yet, but which is safe from attack at the moment, although not definitively (the black pawn can advance to c4). In contrast, the black majority is vulnerable, but it must be attacked immediately, because it threatens to become indestructible:

39.h3!

This is the move that destroys the black majority and enables the white king to attack it.

39.♔f2? was the move in the game, which allows the black majority to become unassailable: 39...h4!. This move converts Black's majority into one of higher quality than White's. The white king can neither attack it nor move away from it: 40.♔e3 ♔b6. Now everything depends on the black king's battle with the white majority: 41.♔f2 c5 (Black threatens to play 42...c4, destroying the white majority) 42.c4. The white majority is now invulnerable, but has been left devalued. There is no future in the possible pawn break b3-b4, because this would result in Black having a more dangerous passed pawn. The black king can therefore move across to the kingside, support his majority and win the game: 42...♔c6 43.♔g2 ♔d6 44.♔f1 ♔e6 45.♔f2 ♔f6 46.♔e2 ♔g5 47.♔e3 h3 48.♔e2 ♔f4 49.♔d3 g3 0-1.

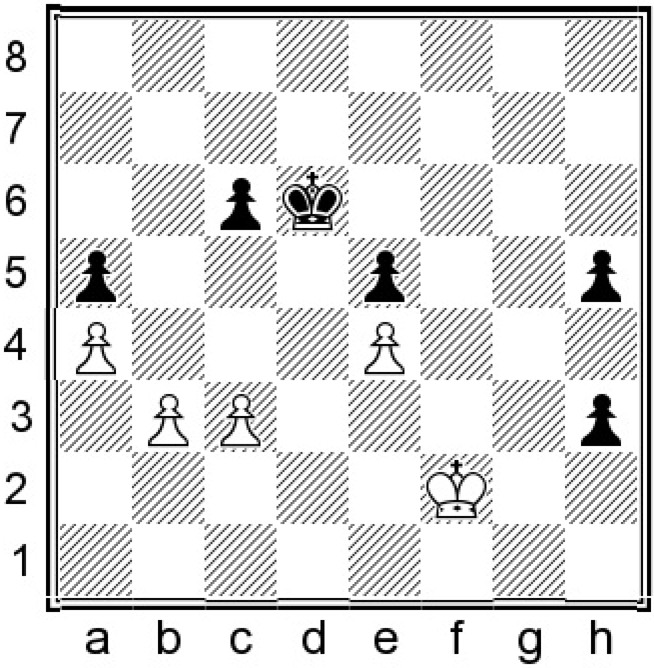
39.h3! gxh3

After 39...g3?! 40.h4! the white king will capture the g3-pawn and then move to the queenside. Even so, it is a draw.

40.♔f2

The white king is going to destroy the remains of the black majority, but this requires more time, which his opponent can in turn exploit to destroy the white majority.

40...♔d6



Black threatens to destroy or at least fix the white majority with the advance ...c6-c5, and if possible ...c5-c4. White's majority has to see to its own defence.

41.b4!

41.♔g3? even loses, because after 41...c5! the white majority will be either devalued or destroyed: 42.c4 (42.♔xh3 c4 43.bxc4 ♔c5–+) 42...♔e6 43.♔xh3 ♔f6 44.♔h4 ♔g6–+.

41...axb4 42.cxb4

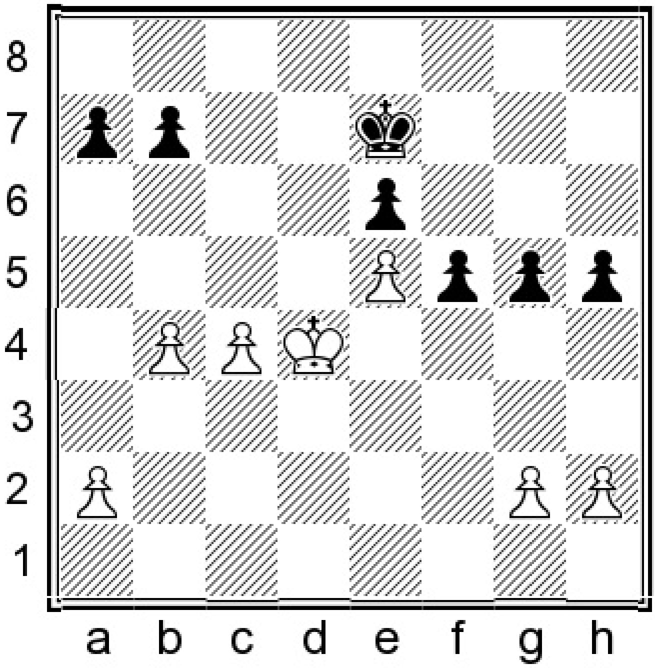
Black must now destroy the white majority, before the white king captures both h-pawns and then returns to the queenside. This results in a race to mutual destruction, which in this case leads to a draw.

42...c5 43.bxc5+ ♔xc5 44.♔g3 ♔b4 45.♔xh3 ♔xa4 46.♔h4 ♔b4 47.♔xh5 ♔c4

The black king arrives first, but White has time to get back to the drawing zone.

48.♔g4 ♔d4 49.♔f3 ♔d3 50.♔f2 ♔xe4 51.♔e2!=

Diego Olmo
Daniel Zamarbide
Eibar 2005

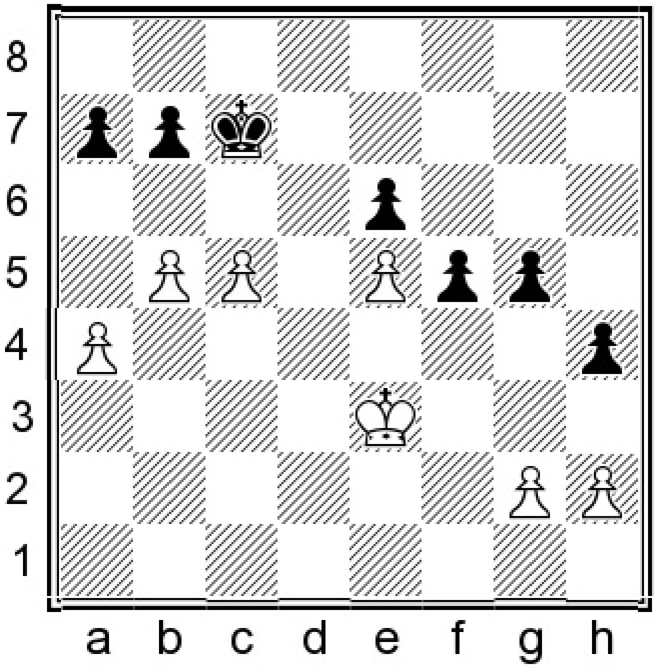


Black to move

Here we have the typical scenario of our theme. Each king must confront the opposing majority and the result of the game will depend on the outcome of these two contests.

27...♔d7?

Black wastes his first opportunity to make his majority invulnerable and pass the problem back to White. The advance 27...h4! makes the black majority completely secure. Now it is White who must be careful that his majority does not become vulnerable. He can do this in various ways... but not just anyhow: 28.c5 ♔d7 29.b5 (this is fine, but only on condition that the white a-pawn does not advance to a5) 29...♔c7 30.a4 ♔d7 31.♔e3 ♔c7=.



analysis diagram

Now both majorities are type 2, immobile but secure. For example, now 32.a5? would be a terrible blunder due to 32...a6! and the white majority crumbles.

27...♔d7? 28.b5?

White advances his majority but fails to exploit the opportunity to destroy the enemy majority with 28.h4! gxh4. Now the black majority is vulnerable, but before attacking it with the king White needs to consolidate his own majority: 29.b5! (29.♔e3? ♔c6 30.♔f4 b5! weakens the d5-square and the e5-pawn falls) 29...♔c7 30.c5 a6 31.a4! and the white majority can look after itself. From here, White wins by bringing his king across to destroy the black kingside and then bringing it back to the queenside.

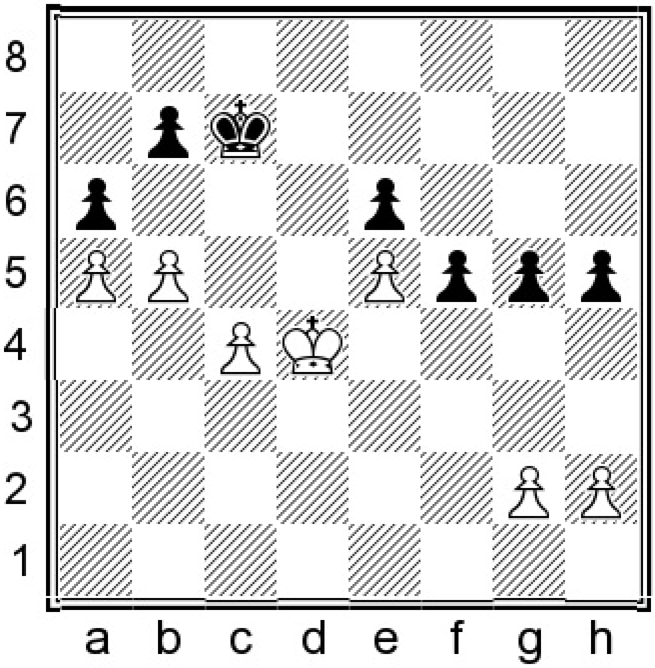
28...a6?

Again, 28...h4! was necessary.

29.a4?

The same for White: 29.h4!+–.

29...♔c7? 30.a5?



This is overambitious on White's part and weakens his majority permanently. This position would make a good endgame study. If Black now first consolidates his majority and then undermines and destroys the enemy majority, he can win. At this point we depart from the course of the game, because the work of destruction of the white majority requires some effort and we want to analyse it clearly.

Instead, 30.h4! g4 31.c5 would still have been winning for White.

30...h4!

The game continued: 30...f4? (this weakens Black's majority more seriously than White's) 31.♔e4! (finally White decides to destroy the black majority) 31...b6+ (now this is too slow; the move was there all the time but was only sought when disaster was near) 32.axb6 ♔xb6 33.bxa6 ♔xa6 34.h4! gxh4 35.♔xf4 ♔b6 36.♔g5 ♔c5 37.♔xh4 ♔xc4 38.♔xh5 ♔d5 39.g4 ♔xe5 40.g5 ♔f5 41.g6 ♔f6 42.♔h6 1-0.

31.h3 ♔b8!!

Black prepares to create a passed pawn on the queenside by removing his king from the check on the b6-square. 31...b6? would have been hasty, in view of 32.axb6+ ♔xb6 33.bxa6 ♔xa6 34.♔c5! f4 35.♔d6 g4 36.c5, leading to an equal queen ending.

32.♔d3

32.♔c5 (preventing ...b7-b6 for the time being) 32...g4! (forcing the white king to go back) 33.♔d4 gxh3 34.gxh3 b6! (creating a second passed pawn) 35.axb6 a5 and Black wins in similar fashion to the main line.

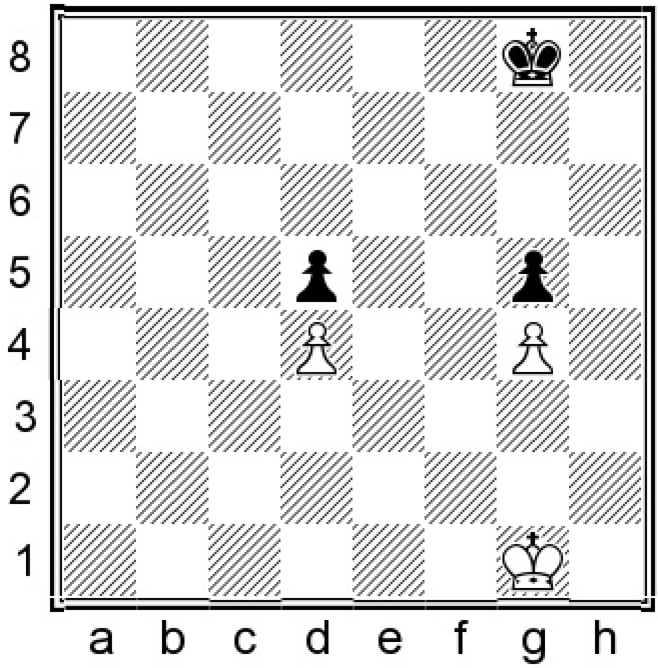
32...b6! 33.axb6 a5 34.c5 g4 35.c6 gxh3 36.gxh3 a4

As often happens, two widely separated passed pawns beat two which are close together. See **Pattern 9**.

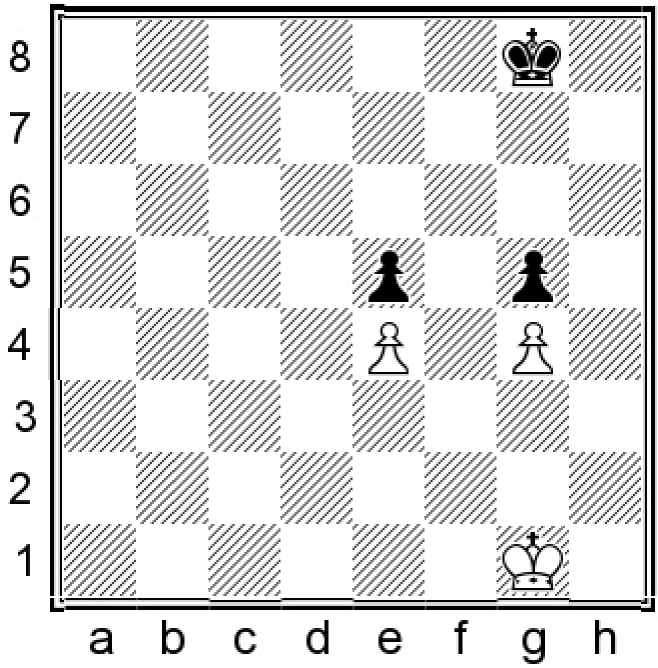
Pattern 4 King entry

A huge advantage can be useless for winning purposes if the stronger side's king finds its access to the opposing camp blocked. This is a frequent occurrence in pawn endings and has been a major feature in some famous games. Sometimes even two connected passed pawns are not enough.

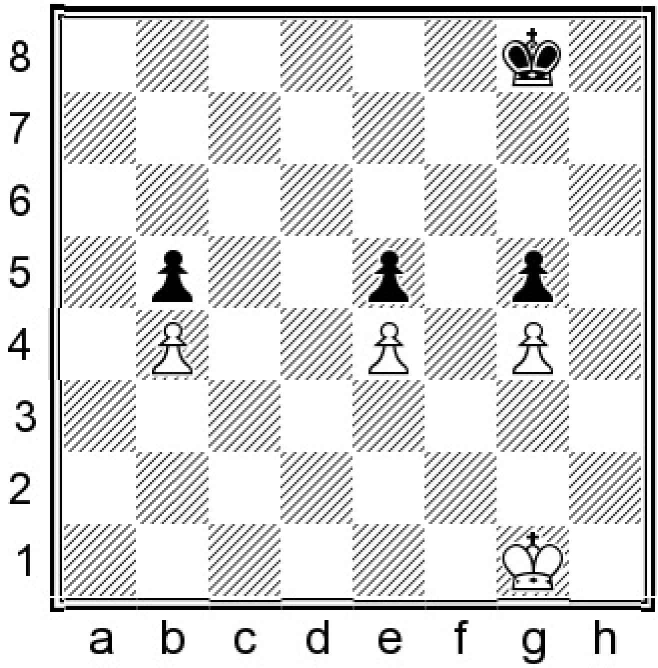
Series: King entry



Position 1



Position 2

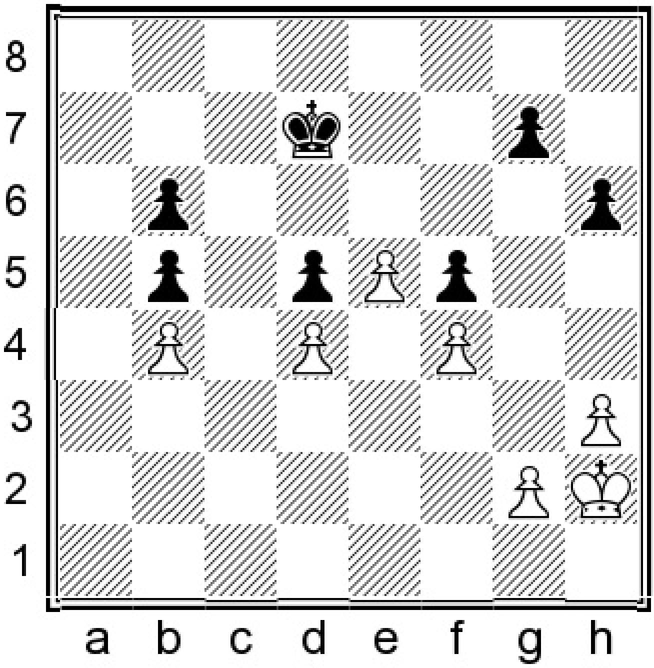


Position 3

If we observe these three schematic diagrams carefully, we can see that with the pawn structure in the first position the black king's entry to White's camp is prevented along six files; in the second position access is denied along five files; and in the final position entry is completely impossible.

Recognising these structures will be useful to us, mainly in pawn endings. A completely closed structure makes it easier for us to visualise that there is no way through, but structures with fewer pawns can easily lead to mistakes.

Conel Alexander
Vera Menchik
Margate 1937 (4)



White to move

Although this position is very well known, its aesthetic impact is hard to surpass. White has just exchanged queens and this was a correct decision... if he had now taken care. We can observe that the pawns on the fourth and fifth ranks form a barrier to both kings across seven of the eight files, which should be a warning sign.

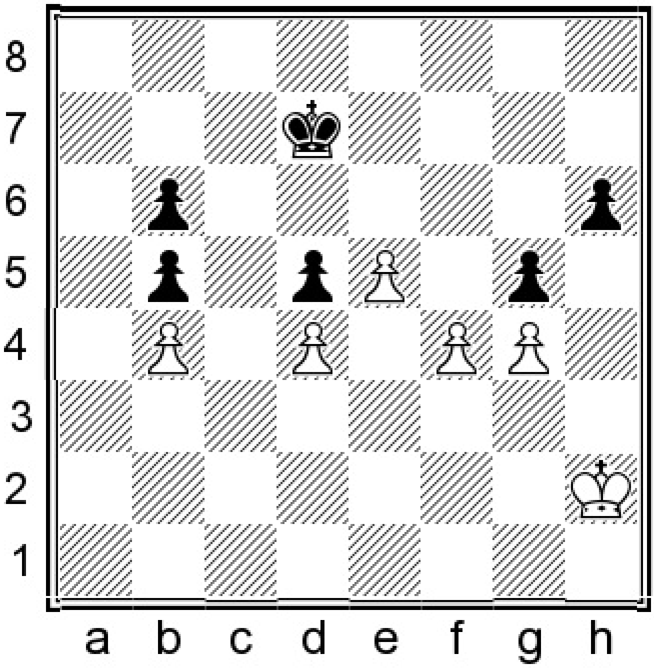
47.g4?!

This is a correct move, but also the first step towards disaster. White is blind to the warning sign that his king has no easy entry into the enemy camp.

47...fxg4 48.hxg4?

There were still two winning moves. The simpler way was 48.f5, which returns the pawn but guarantees the king's entry: 48...gxh3 49.♔xh3 ♔e7 50.♔g4 ♔f8 51.e6 ♔e7 52.♔h4! (it is curious that every other move loses now, for instance 52.♔h5? ♔f6 53.♔h4 g6!–+) 52...♔f6 53.♔h5 ♔e7 54.♔g6 ♔f8 55.e7+ ♔xe7 56.♔xg7.

48...g5!

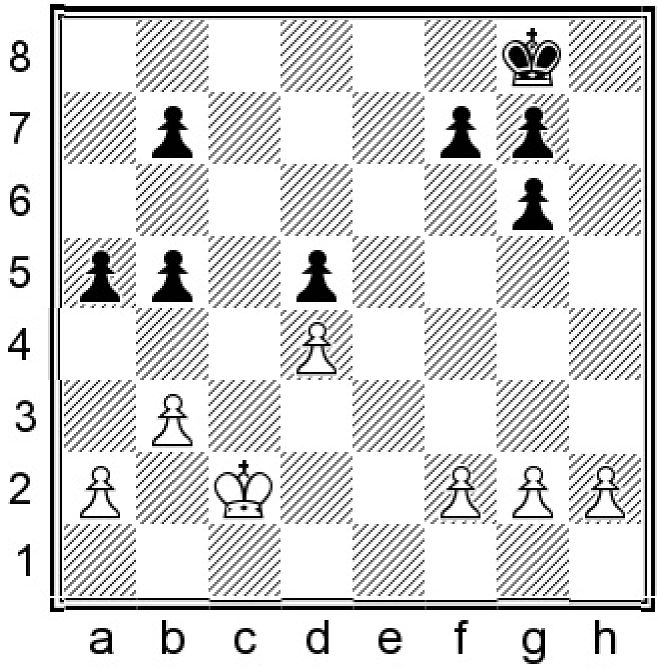


And here White understood too late that his king has no entry, and not even the creation of two connected passed pawns offers any hopes of winning the game. If we just observe the pawns blocked on the fourth and fifth ranks it is easy to recognise the diagrams with which we introduced this theme.

49.f5 ♔e7 50.♔g2 ♔f7 ½-½

Sometimes this theme appears in reverse: a position which seems very closed is opened up, as a result of a lack of attention to the main theme.

Kiprian Berbatov 2461
Debaraj Chatterjee 2288
Khanty-Mansiysk ol 2010 (1)



White to move

Here, everything seems to indicate a draw, but the black king is very distant, so White tries his final trick:

31.b4!? b6?

Black fails to see the danger, but neither does he aspire to achieve anything with this move. Instead, 31...a4! would have securely locked the queenside and the game would have ended in a draw.

32.a4!!

With this brilliant and unexpected move, White blows up the whole queenside pawn mass and guarantees the entry of his king.

32...bxa4

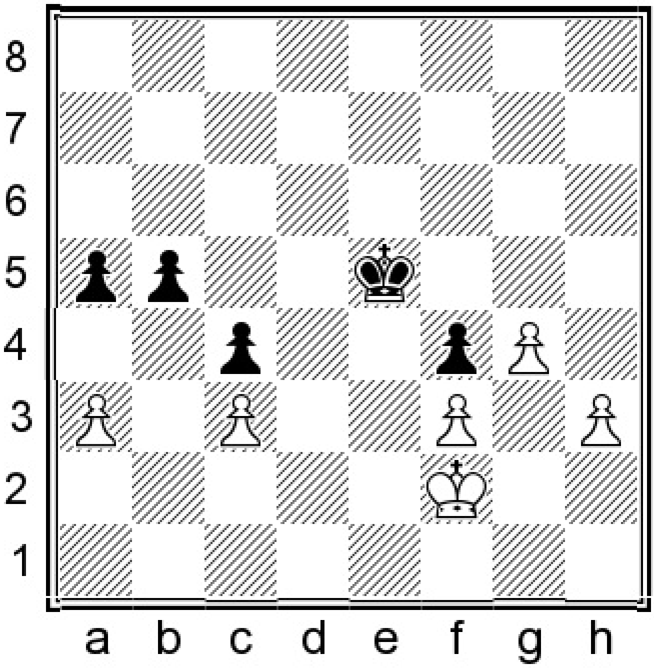
32...axb4 33.♔b3!+–.

33.bxa5 bxa5 34.♔b2 ♔f8 35.♔a3 ♔e7 36.♔xa4 ♔d7 37.♔xa5

From here the white king is sure to capture the d5-pawn, even though he has no reserve tempi.

37...♔c6 38.h4 f6 39.g4 g5 40.hxg5 1-0

Alfonso Romero
Jonathan Speelman
Dubai ol 1986 (10)



Black to move

This position from the game Romero-Speelman is the same, in essence, as the famous Alexander-Menchik encounter. The board is sealed to the white king and the two passed pawns on the g- and h-files are not strong enough to win on their own.

It is important that on the queenside Black has a high-quality majority.

41...♔f6 42.♔e2!?

Threatening 43.a4, which would unlock the queenside and win.

42...a4!

Preventing White's threat and permanently blocking the white king's entry.

After 42...♔g6?? 43.a4! b4 (43...bxa4 44.♔d2 and the white king captures all the pawns) 44.cxb4 axb4 now White wins because he has a passed pawn on each wing and the black king cannot cope with both of them, whereas the white king can deal with Black's two connected passed pawns: 45.h4 ♔f6 46.a5 ♔e6 47.a6 b3 48.♔d2 ♔d6 49.a7+–.

Instead, 42...♔e5?! would not lose, because the black king could help its pawns to promote, but it would mean entering unnecessary complications.

43.♔f2 ♔g5 44.♔e2 ½-½

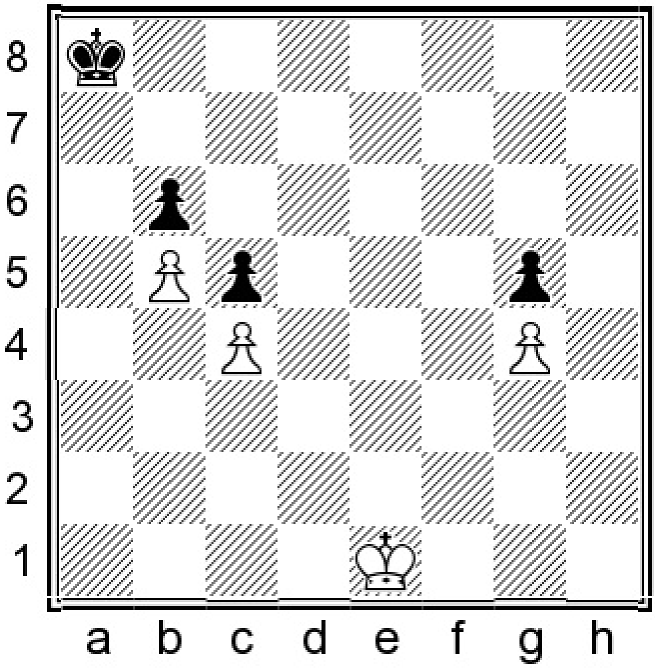
White has to be satisfied with a draw. If he tries to enter with his king via h3 and h4 he would be met with an unpleasant surprise. 44.♔g2?? moves out of the square of the c4-pawn: 44...b4! and one of the black queenside pawns queens.

Pattern 5 A useless central passed pawn

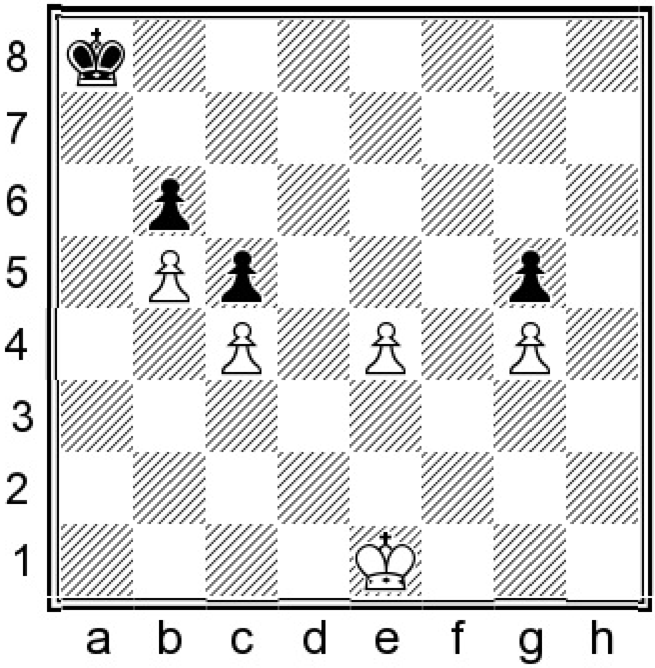
This topic is related to the previous one. One consequence of a king having entry problems is that some positions with an extra passed pawn, even a central one, cannot be won. The same idea can also occur on wing files.

We begin with a series of diagrams which remind us of the previous section.

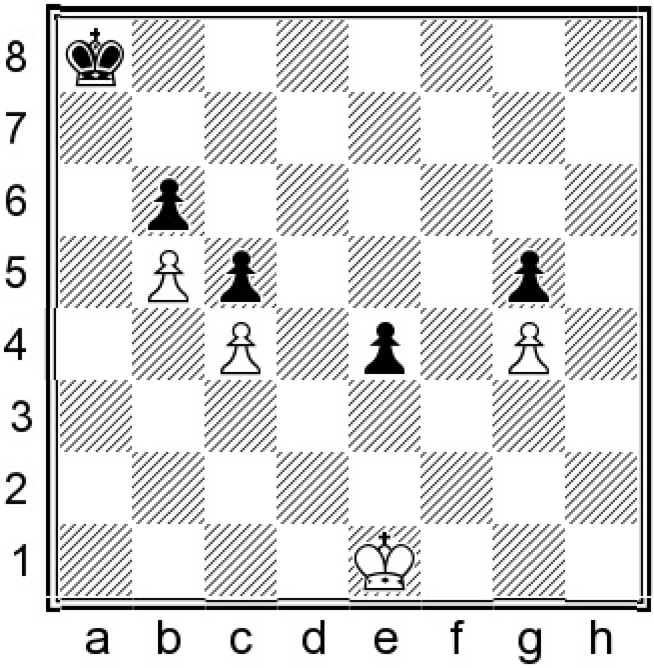
Series: The central defile



Position 1



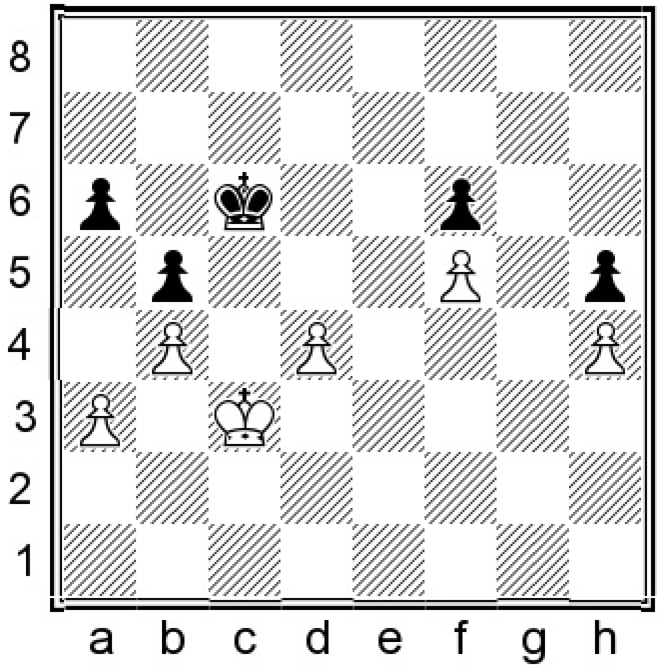
Position 2



Position 3

Here it is only possible to pass through the centre. In the first diagram, White wins if it is his turn to move, but it is a draw if it is Black's turn, since the black king arrives in time to prevent its counterpart from entering. In the second diagram there is a white pawn on e4 and White does not win even if it is his turn to move, because his pawn gets in the way and it cannot be sacrificed in time. In the third position the pawn is a black one and once again White wins if it is his turn to move, but it is a draw with Black to move, just as in the first case.

Now we shall analyse a schematic position:

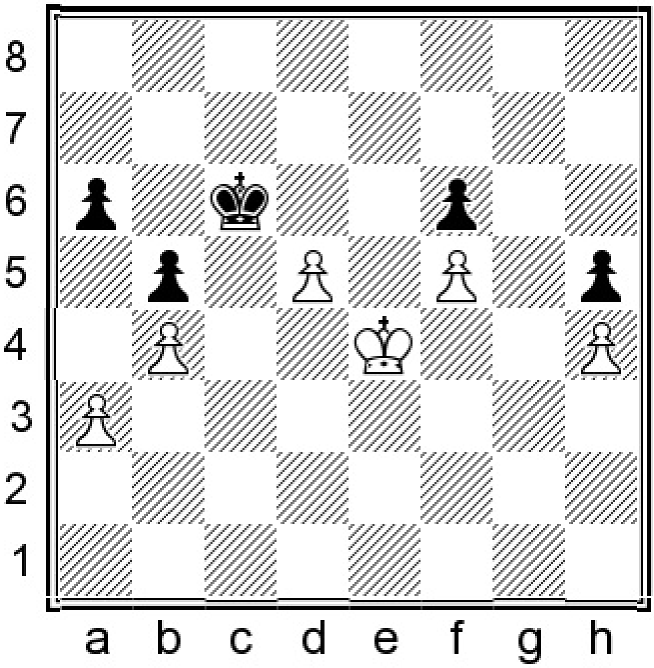


The uselessness of a central passed pawn in king and pawn endings has the same cause as in other endings with one piece: the defending king can deal with it and still remain near enough to attend to other tasks.

1...♔d5

Now the d4-pawn is indeed of some use, because otherwise the black king would reach f5, but once this moment has passed we shall see that the options for using it actively are nil. Furthermore, other moves by the black king also draw, specifically... all of them! For instance, 1...♔b7!? (to show only the most absurd) 2.♔d3 ♔c6 3.♔e4 ♔d6 4.d5 and the pawn continues to occupy a useless position, although from here precise defensive moves are required; specifically Black is forced to respond to ♔d4 with ...♔d6, e.g. 4...♔d7 5.♔d3 ♔e7 6.♔d4 ♔d6=.

1...♔d5 2.♔d3 ♔d6 3.♔e4 ♔c6 4.d5+

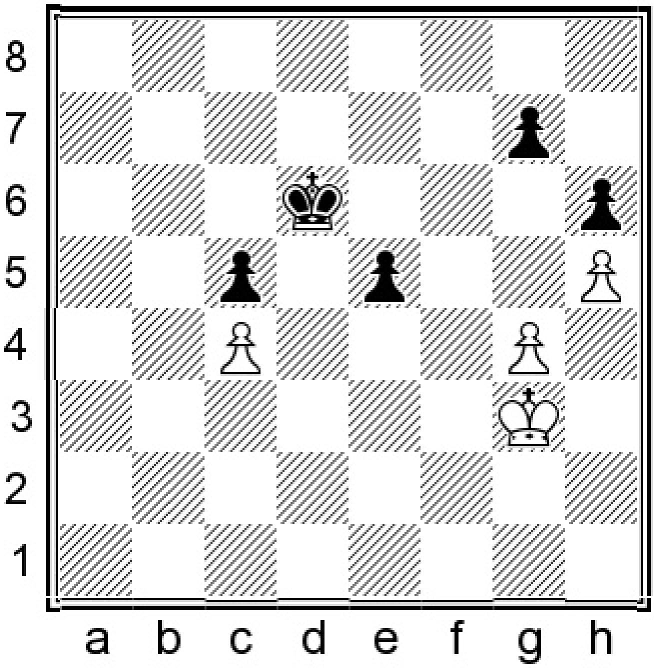


4...♔d7!

Once the pawn advances to d5, Black just has to take care to always answer ♔d4 with ...♔d6.

5.♔d3 ♔c7 6.♔e3 ♔d7 7.♔d4 ♔d6=

Michael Adams 2710
Magnus Carlsen 2848
London 2012 (5)



Black to move

Here we have another example in which a central passed pawn is easy to control and can even become a hindrance for its own king rather than a help. In this case, in the diagram position, Black would win easily, were it not for the existence of the e5-pawn. Two moves before, Adams had offered the exchange of queens on c4, assessing that Carlsen's extra pawn would be useless, and he was close to being right.

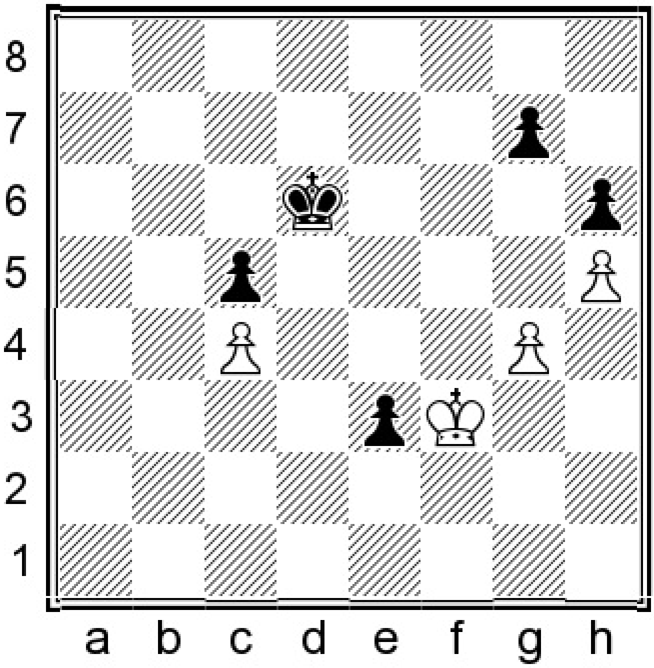
53...e4!

Carlsen is very alert. Sacrificing the pawn is the only way to penetrate with the king, and it has to be done right now! Instead, after 53...♔e6? 54.♔f3 ♔f6 55.♔e4 ♔e6 (55...♔g5 leads to a drawn queen ending) 56.♔e3 it is too late to make any progress, not even by sacrificing the pawn.

53...e4! 54.♔f4

It is curious that now Black needs his pawn to make the white king retreat further.

54...e3! 55.♔f3



Trying to dodge his fate. This stratagem of not capturing a useless pawn sometimes works, but not here, because the black king has another object of attack: the g4-pawn.

55...♔e6!

55...♔e5 56.♔xe3=.

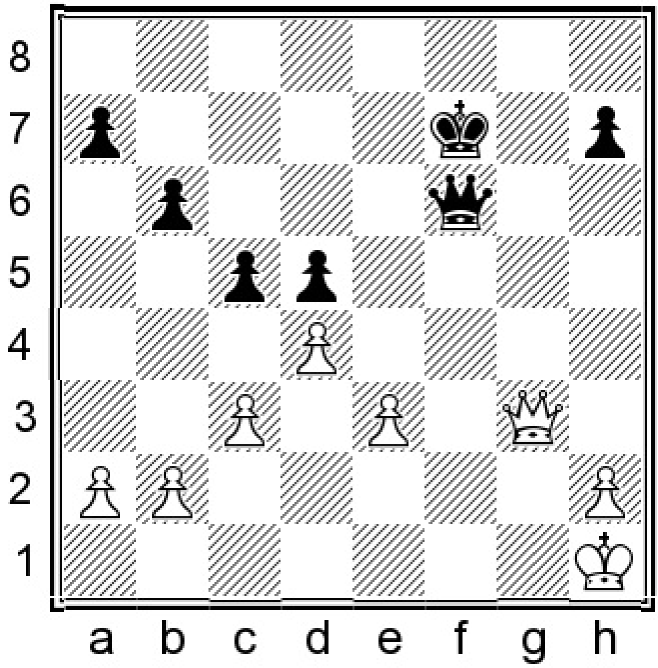
56.♔e2 ♔f6 57.♔f3

57.♔xe3 ♔e5 and the black king penetrates the white position.

57...♔g5 58.♔xe3 ♔xg4 59.♔e4 ♔xh5 60.♔d5 g5 61.♔xc5 g4 62.♔d4 g3 63.♔e3 ♔g4

White resigned. He could have done this a few moves earlier, but now he might as well have continued, for example 64.c5 ♔h3! 65.c6 g2 66.c7 g1=♕+ and the black pawn queens with check.

Aimer del Carmen
Alexandr Pedchenko
Pamplona 2018



White to move

In this diagram, from a game between two juniors, we are going to pose the reader a question. White has an extra pawn. Should he exchange queens with 33.♕f4 ?

33.♕f4?

Hurrying to exchange is one of the most frequent causes of mistakes in chess. Instead, 33.♔g2! would have prepared a winning exchange of queens and would have maintained a big advantage.

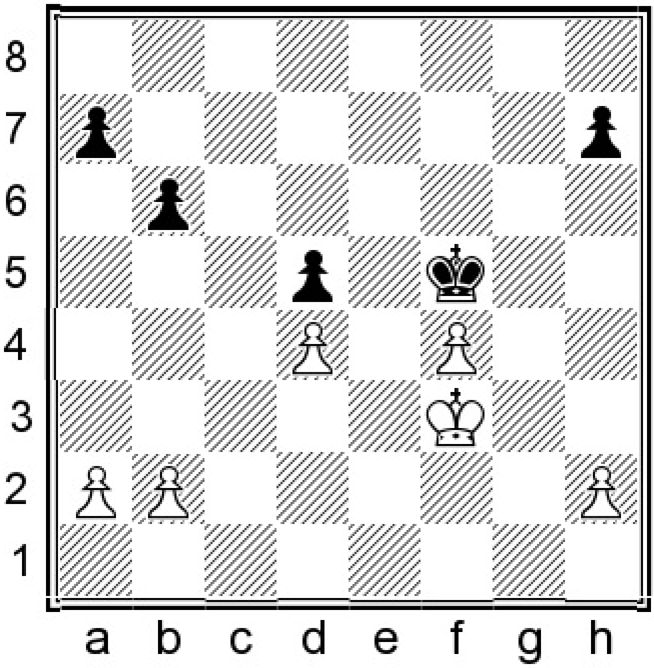
33.♕f4? ♕xf4! 34.exf4 ♔f6?

A small slip in the move order, once again attributable to rushing and time pressure. Instead, 34...cxd4! 35.cxd4 ♔f6= would have led to the game position; 34...c4? loses to 35.♔g2 ♔f6 36.♔f3 ♔f5 37.♔g3 h5 38.a4 a6 39.♔h4+–.

35.♔g2?

White returns the favour; 35.dxc5 bxc5 36.♔g2 would have won.

35...cxd4 36.cxd4 ♔f5 37.♔f3



And now we have the position with the useless pawn. The white king cannot pass through the central defile and the presence of the pawn is irrelevant. In such cases, reserve tempi sometimes determine the result, but here Black has enough of these.

37...h6

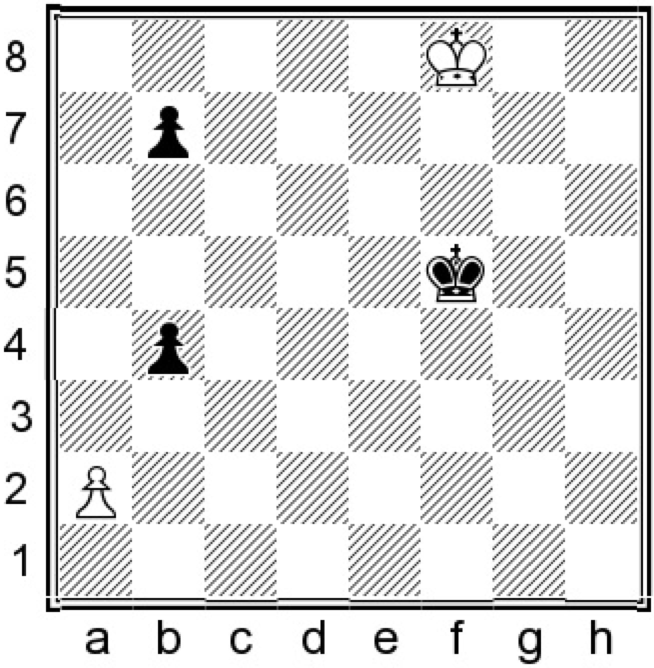
37...b5 38.b4 h5 39.h4 a6?? 40.♔e3 ♔g4 41.f5 ♔xf5 42.♔f3 ♔e6 43.♔f4 ♔f6 and now the reserve tempo is decisive: 44.a3!.

38.h3 h5 39.♔e3 ♔f6 40.a4 a6 41.b4 b5 42.axb5 axb5 43.♔f2 ♔f5 44.♔f3 ♔f6 45.♔g3 ♔f5 ½-½

Pattern 6 The bodycheck

We have already seen in the previous two patterns how important it is for the king to have an entry. On some occasions, the way to prevent it is to stand with your king in the way of the enemy king, blocking its passage. This mechanism is most important in pawn endings and rook vs pawn endings, but it can also occur in other types of ending. The technique has been given various names, but currently the most popular one is *the bodycheck*, originally an ice hockey term, and this is the one we are going to use in this book.

Igor Glek 2430
Konstantin Lerner 2530
Tallinn 1986



White to move

Victory seems very easy here, but in reality Black wins only thanks to the resource of the bodycheck, and he has to apply it several times.

52...♔e6!

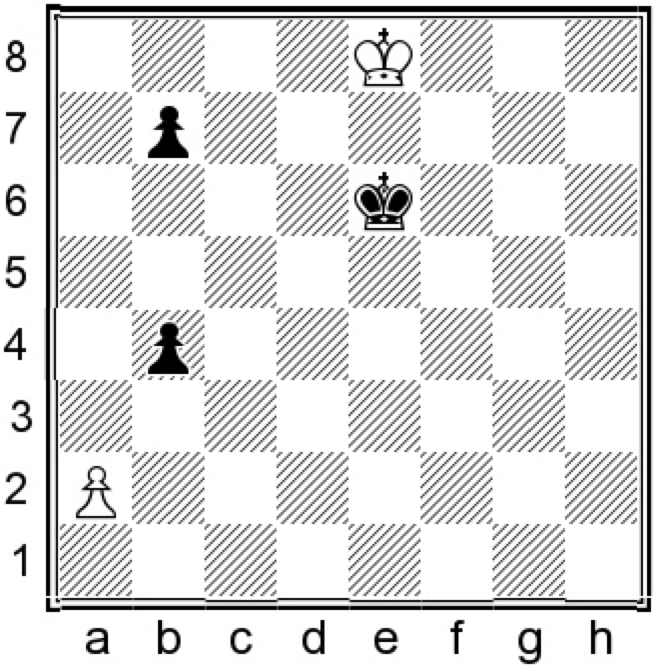
Obstructing the passage of the white king, an operation which will need to be repeated several times.

In a race between the kings, Black does not arrive in time to win: 52...♔e4? 53.♔e7 ♔d3 54.♔d6 ♔c3 55.♔c5=.

It is obvious that the move 52...♔f6? is less obstructive. This is a clear example of the fact that the bodycheck and the opposition are different concepts, although they often coincide: 53.♔e8 ♔e6 54.♔d8 ♔d6 55.♔c8 ♔c6 56.♔b8 ♔b6 57.♔a8 and there is no progress.

52...♔e6! 53.♔e8

In the following variation we can perfectly observe the obstructive role of the black king, which forces its counterpart to make a big detour to get past. 53.♔g7!? b5! 54.♔g6 b3! 55.axb3 b4 56.♔g5 ♔e5 57.♔g4 ♔d4–+.



53...b5! 54.♔d8 ♔d6 55.♔c8 ♔c6 56.♔b8 ♔b6 57.♔c8

Finally the white king has to turn back.

If 57.♔a8 b3! 58.axb3 b4! and then the black king heads for c3 and captures the white pawn.

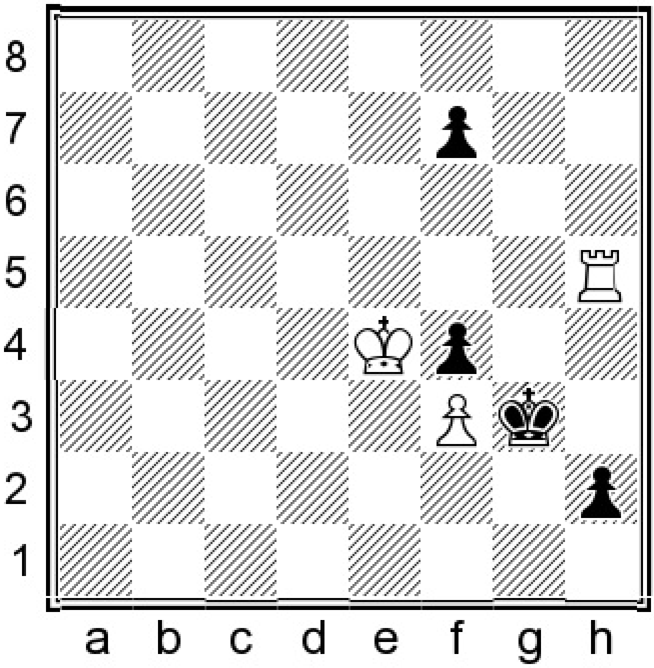
57...b3!

A well-known exchanging manoeuvre, which allows the 'obstructing' king to arrive in time to capture the enemy pawn.

58.axb3 b4 0-1

White resigned in view of 59.♔d7 ♔c5 60.♔e6 ♔d4.

Ian Rogers 2535
Alexei Shirov 2580
Groningen 1990



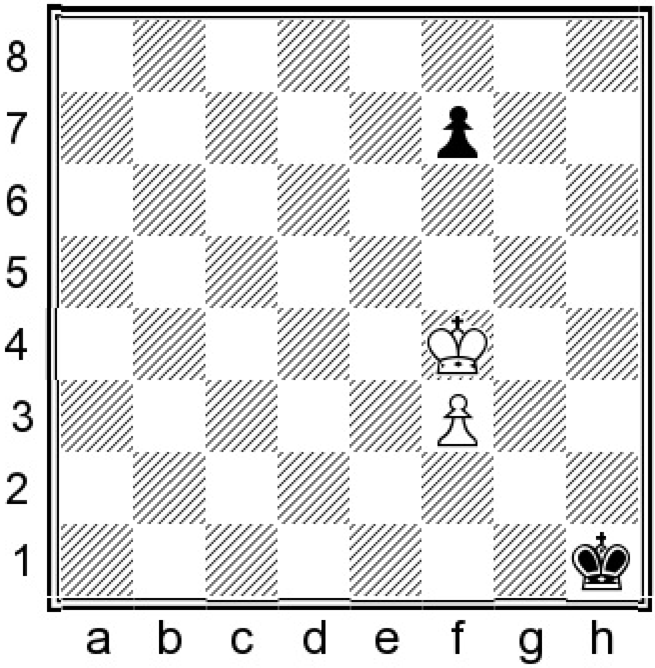
Black to move

Shirov forgot the mechanism of the bodycheck and lost this drawn position:

61...♔g2?

To draw it would have been sufficient to place the pawn one rank further forward: 61...f6! 62.♖h7 ♔g2 and now the exchange of the pawn for the rook works: 63.♔xf4 h1=♕ 64.♖xh1 ♔xh1 65.♔g3 ♔g1 66.f4 ♔f1 67.♔f3 (67.f5 ♔e2 68.♔f4 ♔d3=) 67...f5!=.

61...♔g2? 62.♔xf4 h1=♕ 63.♖xh1 ♔xh1



64.♔g3!

A tremendous bodycheck and obviously the move Shirov had not considered. He resigned on the spot. If 64...♔g1 65.f4 ♔f1 66.f5 ♔e2 67.♔f4 f6 68.♔e4!, another bodycheck, and the white king arrives in time to capture the pawn on f6.

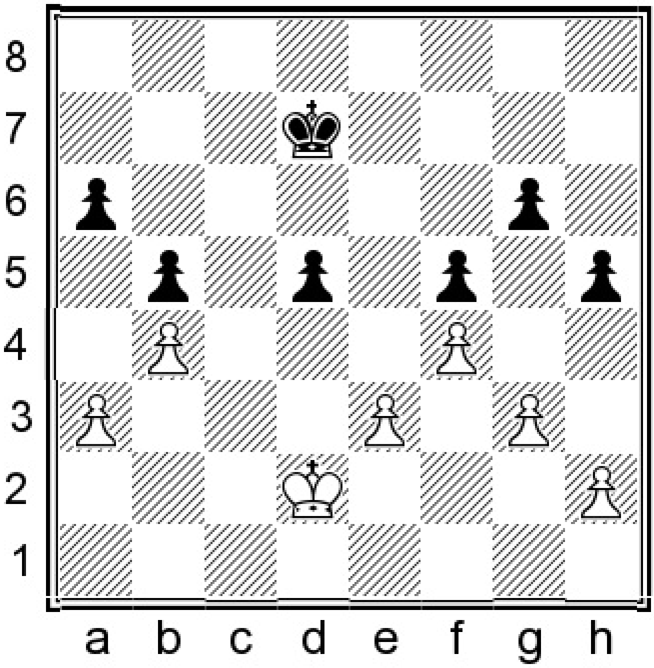
Pattern 7 The isolated pawn

The isolated pawn is a common situation and it has some characteristics that are easy to systematize. Therefore in this section we shall draw some conclusions, mostly at the end.

An isolated pawn in a pawn ending can be just a slight disadvantage or it can become decisive. There are two key factors: whether the attacking side's king can reach the square in front of the isolated pawn, and subsequently whether it can penetrate the enemy position on one side or other of the pawn.

If we study these three positions carefully we shall quickly come to the following conclusions:

Series: The isolated pawn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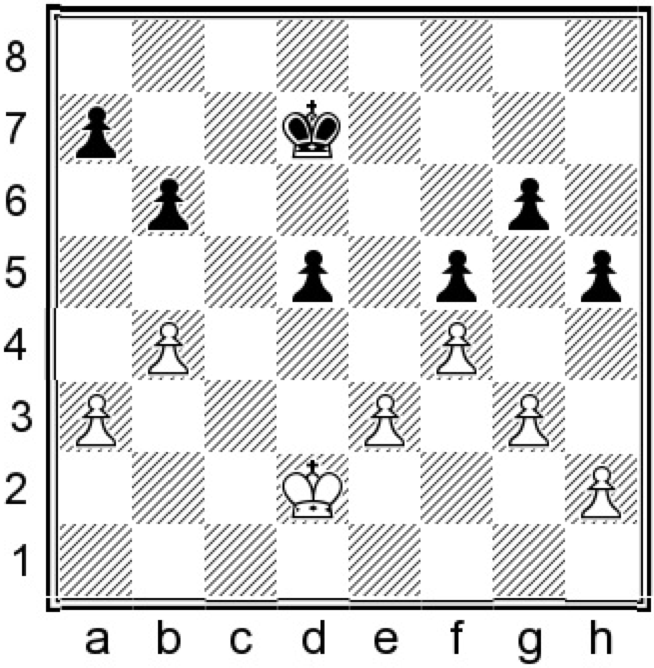
Position 1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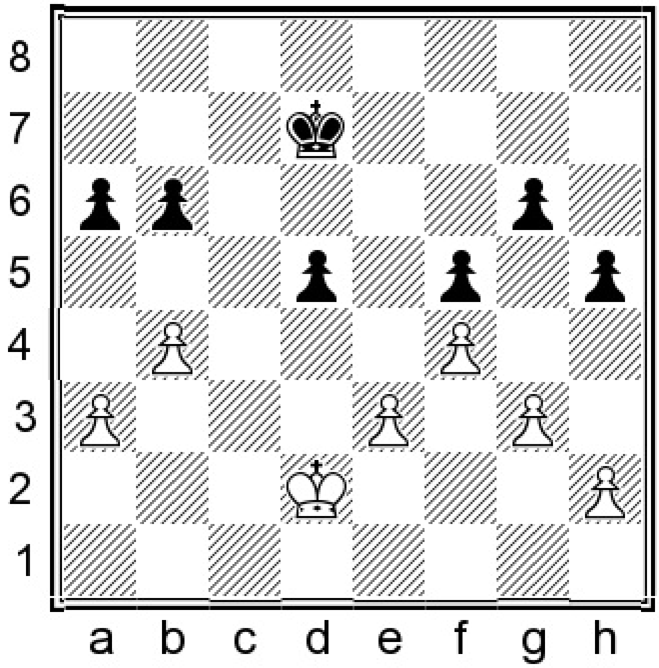
Position 2



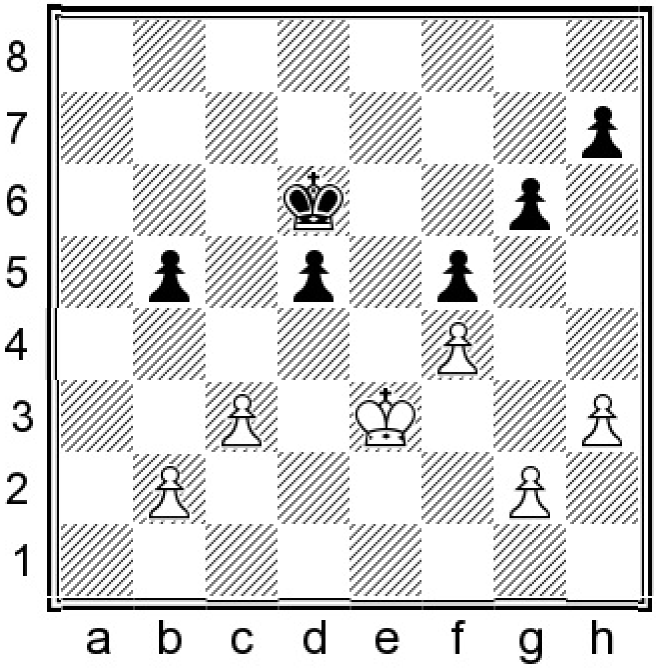
Position 3

In the first position White wins easily by moving his king to d4, as Black cannot defend the invasion points at e5 and c5.

In the second, Black draws easily, as the b6-pawn defends the invasion point at c5, and his king can wait forever, oscillating between the d6- and e6-squares.

In the third, the c5-square is less securely defended and is open to more complex manoeuvres from both players. Although in this case the position is drawn, Black must pay attention to what White does and calculate his counterattack well.

Federico Perez Rodriguez 1998
José Noguera 1960
Valencia 2009 (3)



White to move

Let’s move onto a real game. But if we have observed the previous series attentively, the solution is immediate. White wins by occupying the square in front of the pawn and then using his reserve tempi, and that is what happened:

38.♔d4 ♔c6 39.b3 ♔d6 40.g3 h5?!

Squandering his reserve tempi. 40...♔c6 would have forced White to find the precise move 41.♔e5!.

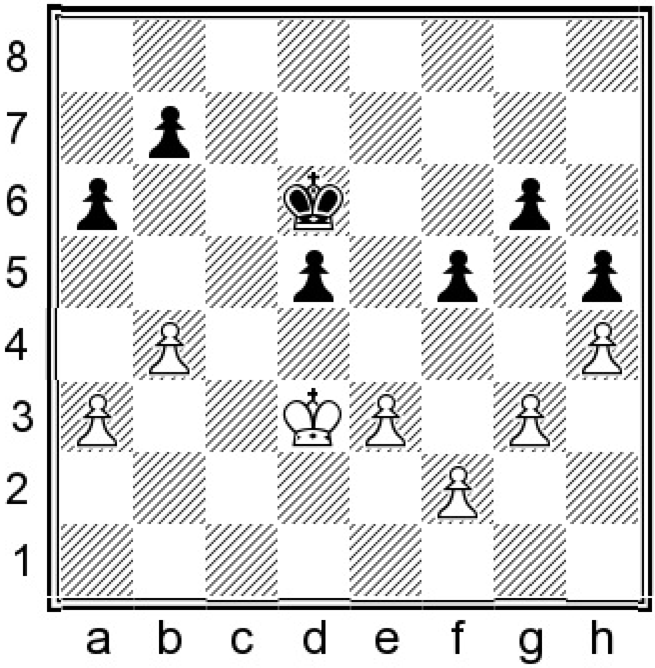
41.b4! h4 42.gxh4

Now the black king has to give way.

42...♔c6 43.♔e5 1-0

Jaan Ehlvest 2615
Igors Rausis 2495
Riga zt 1995 (4)

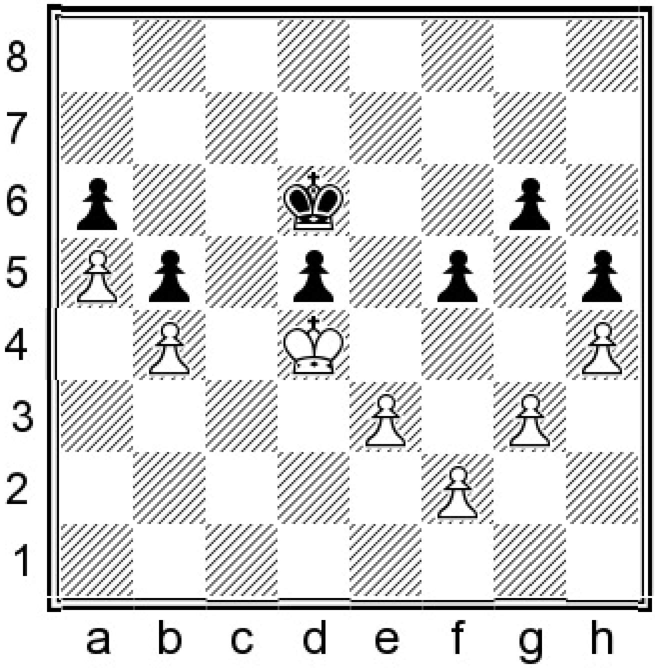
With this (next) position we move up to master level but here too we encounter several errors, on the part of both players, which demonstrates the difficulty of these positions. This is the first in a series of three similar endings which should reveal to us the secrets of the isolated pawn in pawn endings. But, as we shall see, it is not such a simple matter; there are several aspects which need to be taken into account and which we shall try to summarise in the conclusions.



White to move

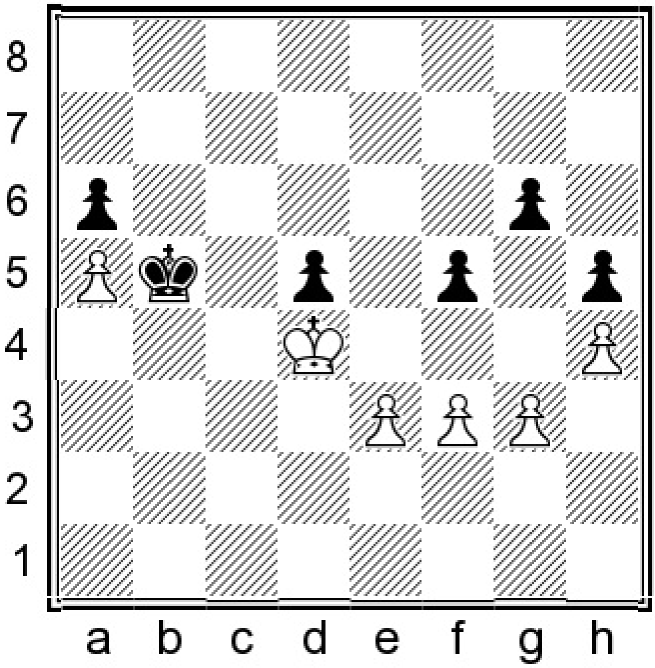
31.♔d4?!

This king move is the most natural, but it was better to gain more space with the a-pawn, to be sure of having the advance a4-a5 ready for the moment when the attacking race starts. So 31.a4! ensures that the pawn can be placed on a5. We shall soon see the effect of this: 31...b6 32.a5! bxa5 (32...b5? 33.♔d4+–.



analysis diagram

This is one of the situations to visualise. The black king has to give way to its white counterpart. It can be seen that, with an isolated pawn, the defending side must keep at least one of the two entry squares protected with a pawn) 33.bxa5 ♔c5 (it is logical to begin the counterattack; making waiting moves with the king would lead to the same) 34.f3! (White must use up one of his reserve tempi, but the other one must be preserved) 34...♔b5 (34...♔c6 35.♔d4 ♔d6 36.f4! (now we use the other one) 36...♔c6 37.♔e5 ♔b5 38.♔f6 leads to the same ending as 34...♔b5 and 35...♔c6) 35.♔d4.



analysis diagram

And we arrive at an important crossroads of variations, where Black chooses his plan.

35...♔c6! leads to a queen ending in which he can continue the struggle (but 35...♔xa5?!, the natural move, meets with an unexpected reply: 36.♔c5!! (36.♔xd5 ♔b6 37.e4 fxe4 38.fxe4 a5=). An outstanding bodycheck; the black king has to worsen his position and White wins: 36...♔a4 37.♔xd5 ♔b3 38.e4 a5 39.e5 a4 40.e6 a3 41.e7 a2 42.e8=♕ a1=♕ 43.♕e3+ and White is able to force the exchange of queens): 36.♔e5 ♔c5 37.♔e6! (37.♔f6? is premature, due to the counterattack against e3: 37...♔c4!=) 37...♔c4 38.f4! (it is necessary to use up the other tempo and force the black king to choose between two objectives, the a5-pawn or the e3-pawn) 38...♔b5 (38...♔d3 39.♔xd5 ♔xe3 40.♔c6 and in this race, the more advanced position of the a5-pawn is decisive) 39.♔f6 ♔xa5 40.♔xg6 ♔b4 41.♔xf5 a5 42.♔e6 a4 43.f5 a3 44.f6 a2 45.f7 a1=♕ 46.f8=♕+ and with an extra pawn, better king and the initiative, White should win.

31.♔d4?! b6!

We have already seen that the possibility of playing ...a6-a5 is crucial. With this move Black should be able to draw.

32.a4 ♔e6?

After a phase of correct defence, Black now becomes indecisive again. It is certain that after the advance of Black’s a-pawn to a5, the square c5 will be open to invasion by the white king, but White can force this anyway by playing a4-a5 himself, so it is a question of calculating and choosing the best moment.

32...a5! leads to a draw: 33.bxa5 bxa5. Now White needs to use up one or both of his reserve tempi: 34.f3 (34.f4 is very similar: 34...♔c6 35.♔e5 ♔c5 36.♔f6 ♔c4! 37.♔xg6 ♔d3 38.♔xf5 ♔xe3=) 34...♔c6 35.♔e5 ♔c5 36.♔f6 (36.♔e6? ♔c4! even loses) 36...♔c4! 37.♔xg6 ♔d3 38.♔xh5 ♔xe3 and both pawns queen.

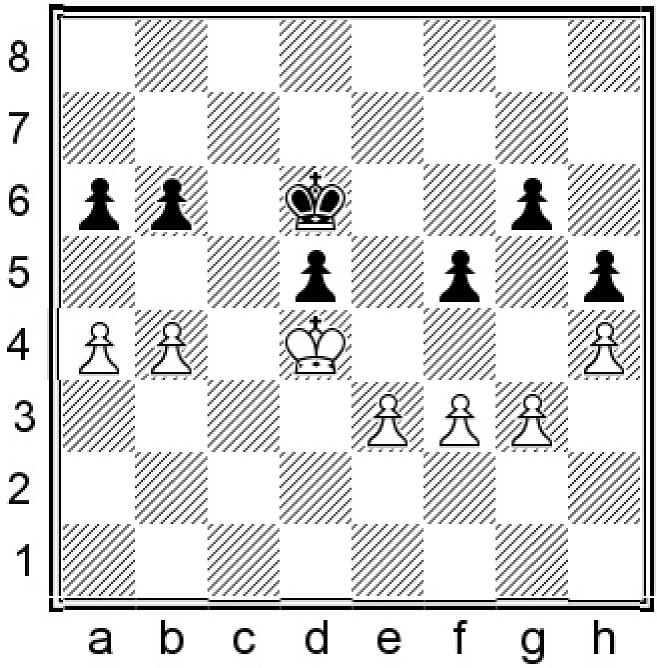
33.f3?!

White misses his first opportunity to play a4-a5, which leads to a queen ending with a great advantage: 33.a5! bxa5 34.bxa5 ♔d6 35.f4 ♔c6 36.♔e5 ♔b5 37.♔f6 ♔xa5 38.♔xg6 ♔b5 39.♔xf5 a5 40.♔e6 a4 41.f5 a3 42.f6 a2 43.f7 a1=♕ 44.f8=♕, with much work still to be done, but White’s advantage should be decisive.

33...♔d6 34.♔c3?

White misses his second opportunity to play a4-a5 and Black continues to allow it.

34...♔e5? 35.♔d3? ♔e6 36.♔c3 ♔e5 37.♔d3 ♔e6 38.♔d4 ♔d6



39.a5!

Finally White convinces himself that there is no other way to force the position and he executes the winning plan.

39...bxa5 40.bxa5 ♔c6 41.♔e5 ♔b5?

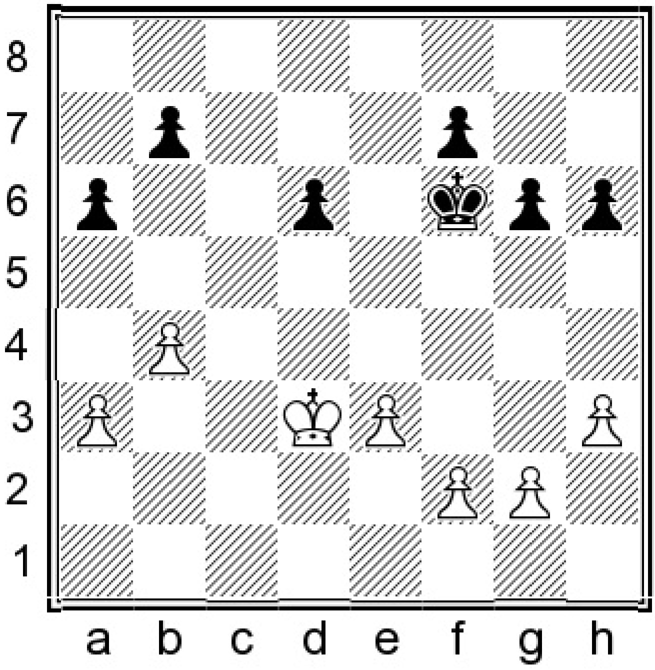
Making things very easy for White. Instead, 41...♔c5! leads to a position that we have already analysed above, in the note to the move 31.a4!. It forces White to find the right move and continue the struggle in a queen ending.

42.♔xd5 ♔xa5 43.♔c5! 1-0

It takes Black two tempi to release his pawn to advance.

The great Mihai Suba, already a veteran then, sensed that he could snatch the full point in the following ending, and he came very close, but in the end a miscalculation left him empty-handed.

Mihai Suba 2319
Hector Laiz 2098
La Roda 2015 (2)



Black to move

33...♔e6?!

33...♔e5!? – defending with the king ahead of the isolated pawn is a useful resource in such endings; sometimes it hinders the enemy king from approaching the pawn, and at worst it forces the attacker to use up some of his reserve tempi: 34.a4 b6 35.f3 ♔d5 36.e4+ ♔e5 37.g3 ♔e6 38.♔d4 b5 39.axb5 axb5 40.f4 f6 and White does not have enough reserve tempi to conquer the d5-square, so it is a draw (but note that with the pawn on h2 the position would be winning): 41.g4 g5! 42.f5+ ♔e7! 43.♔d5

♔d7=.

33...♔e6?! 34.♔d4 f5?

In general, it is better to keep the pawns back (especially the f-pawn, which would defend the square e5). The ending would become more and more similar to Ehlvest-Rausis after 34...b6! 35.a4 d5! 36.a5 bxa5 37.bxa5 ♔d6!. Now the f-pawn can defend the invasion square e5 and Black needs only to be attentive to the e3-e4 break, which would lead to a ‘dominant king’ situation: 38.h4 g5 (Black must take some care regarding the pawn break e3-e4: 38...h5? 39.e4! dxe4 40.♔xe4 f6 41.f3! (marking time) 41...♔e6 42.♔d4 ♔d6 43.f4 f5 44.g3, with total zugzwang; White achieves a very superior queen ending, thanks to the theme of dominant king) 39.hxg5 hxg5 40.f3 ♔c6 41.g3 (41.e4 dxe4 42.fxe4 f6=) 41...♔d6 42.g4 f6=.

35.a4!

As in the previous game, the advance of the pawn to a5 poses Black many problems.

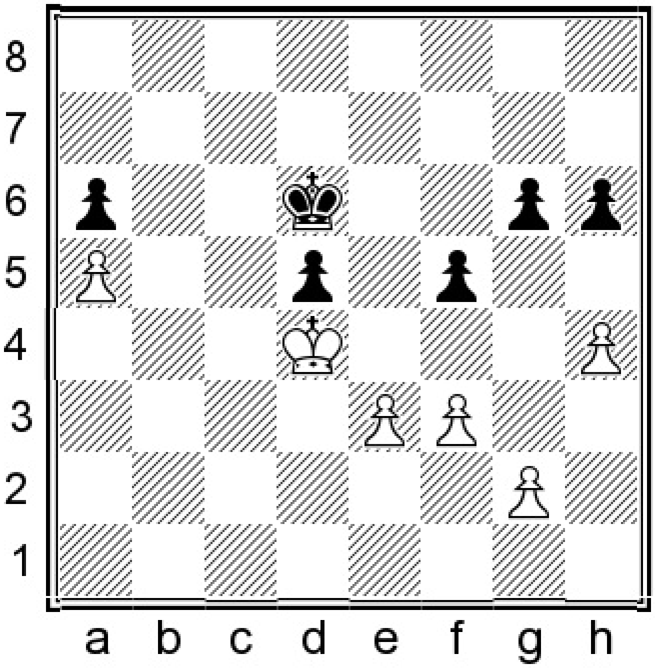
35...b6 36.f3?!

But now Suba too (like Ehlvest before him) starts to hesitate. 36.a5! bxa5 37.bxa5 and White wins, because no matter whether the black pawn is on d5 or d6, the white king will manage to enter: 37...♔e7 (37...d5 38.♔c5!+–) 38.♔d5 ♔d7 39.f4 h5 40.h4 and the black king must give way.

36...d5!

Taking advantage of the fact that at the moment the c5-square is protected by the pawn on b6.

37.a5 bxa5 38.bxa5 ♔d6 39.h4



39...♔e6!?

This is not a sound move but it sets a good trap. The normal continuation could even transpose to Ehlvest's game: 39...h5!? 40.g3 and we have transposed to Ehlvest-Rausis: 40...♔c6 41.♔e5 ♔b5 42.♔xd5 ♔xa5 43.♔c5 1-0 Ehlvest-Rausis, Riga 1995.

40.♔c5?

Falling into the trap, although this is the move that one might make almost automatically. Instead, 40.g3! is the winning move: then after 40...♔d6 White brings to light another of the defects of the isolated pawn. By means of well prepared pawn breaks, the attacker can achieve a symmetrical position with dominant king: 41.g4! fxg4 42.fxg4 ♔e6 43.e4! dxe4 44.♔xe4, reaching a dominant king position which, combined with the advanced position of the a-pawn, gives White the victory.

40...♔e5!

Preparing the counterattack.

41.g3

If 41.♔b6?? f4! 42.exf4+ ♔d6! and after both pawns queen the white king is caught in the well-known mating net on the edge of the board: 43.♔xa6 d4 44.♔b7 d3 45.a6 d2 46.a7 d1=♕ 47.a8=♕ ♕b3+ 48.♔a6 ♕a4+ 49.♔b7 ♕b5+ 50.♔a7 ♔c7.

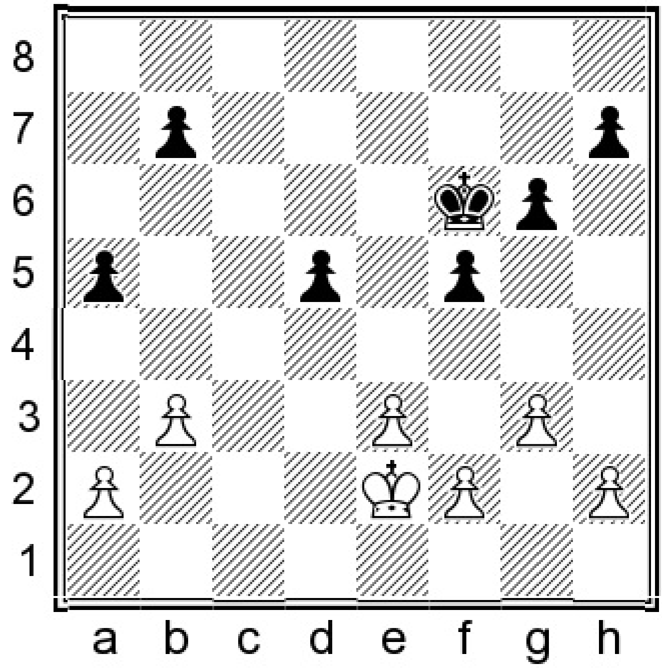
41...g5 42.hxg5 hxg5 43.♔b6??

Finally White falls into the second part of the trap and loses the full point. By now, 43.g4! was the only move which saved White: 43...f4 44.exf4+ ♔xf4 45.♔xd5 ♔xf3 46.♔c5 ♔xg4 47.♔b6 ♔f4 48.♔xa6 g4 49.♔b5 g3 50.a6 g2 51.a7 g1=♕ 52.a8=♕=.

43...f4 44.gxf4+ gxf4 45.exf4+ ♔d6 0-1

46.♔xa6 d4! 47.♔b6 (47.♔b7 is no different) 47...d3 48.a6 d2 49.a7 d1=♕ 50.a8=♕ ♕b3+.

Zenon Franco 2495
Miguel Illescas 2535
Barcelona 1990 (3)



White to move

The position is similar to the previous ones, but there is an essential difference: the position of the black pawn on a5 prevents the c5-square from being weakened by the advance of White’s queenside pawns. So all Black needs to do to achieve a draw is to place his pawn on b6 and wait around with the king on the squares e6 and d6.

32.♔d3 ♔e5

Provoking the move f2-f4, which White refrains from making. A purely waiting strategy would have been good enough though, for instance 32...b6 33.♔d4 ♔e6 34.h4 ♔d6 35.f3 ♔e6 36.g4 fxg4 37.fxg4 ♔d6 38.g5 ♔e6 39.e4 dxe4 40.♔xe4 ♔d6=.

33.h3 h5 34.h4 b6 35.a3 ♔e6 36.♔d4 ♔d6 37.f3 ♔e6 38.♔c3 ♔e5 39.♔d3 ♔d6 40.♔d4 ♔e6 41.♔c3 ♔d6 42.b4 a4 43.♔d4 ♔e6 44.f4 ♔d6 45.b5 ♔e6 46.♔c3 ♔d7 47.♔d3

Draw.

Conclusions

The isolated pawn seems a simple topic but, as we have seen, many mistakes are made. We are going to try to establish some useful rules.

In a pawn ending there are two problems for the defender (i.e. the side with the isolated pawn):

a) The possibility of creating a lateral passed pawn, and

b) The possibility of the attacker's king invading on one side or the other.

These problems are only serious when the attacker's king is able to occupy the square directly in front of the isolated pawn.

For the defending side, the most advisable policy is to defend at least one of the enemy king's two invasion squares with a pawn. The other policy might be to defend the invasion square with the king without falling into zugzwang.

In addition the defender should think about how to place the isolated pawn so as not to allow the creation of a passed pawn.

Both players must be very careful with their reserve tempi, but as a rule this is more difficult for the player with the isolated pawn.

Both players should keep in mind the possibility of a simplifying pawn break which will lead to a symmetrical ending with a dominant king.

Last but not least, in some situations the player with the advantage must watch out for the poisonous counter-break g3-g4 (or g4-g5, or b4-b5 or b3-b4) – see **Pattern 8**.

Pattern 8 The breakthrough

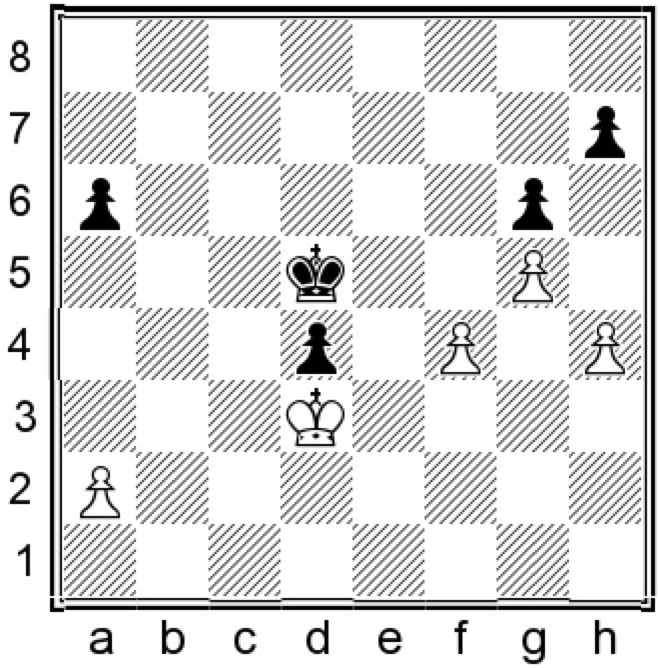
Pawn breakthroughs, involving pawn sacrifices for the sake of creating a passed pawn, are a fundamental resource, one which nevertheless continues to take many players by surprise, even players of the highest level, which is why it seems necessary to study numerous examples, and to do so very carefully.

The only conclusion common to all positions is the need to look out for the signs.

The warning signs are clear: as long as the pawns are mobile (and especially if there is a pawn majority), a passed pawn can be created at any moment and if the enemy king is far away it might prove unstoppable.

In this section we are going to present a few examples, but this is a pattern that requires you to see many positions and therefore we recommend that you solve as many tactical exercises as possible on this topic.

José Raul Capablanca
Edward Lasker
London simul 1913



White to move

The diagram position is from an exhibition game which was not devoid of mistakes. White has a kingside pawn majority, but he will not be able to create a passed pawn without sacrificing one of his pawns.

39.f5?

This first pawn break is a mistake. Black will be able to approach with his king and achieve the draw, although not without some difficulties. Instead, 39.a3! was the correct move, passing the move to Black. We can see here, once again, that the white position is winning thanks to the fact that he has some reserve tempi (see **Pattern 11**). 39...a5 40.a4 (zugzwang – finally the black king has to move and worsen his position) 40...♔c5 (40...♔e6 41.♔xd4 ♔f5 42.♔c5 and the white pawn will queen first: 42...♔xf4 43.♔b5 ♔g4 44.♔xa5 ♔xh4 45.♔b6 ♔xg5 46.a5 h5 47.a6 h4 48.a7 h3 49.a8=♕+–) 41.f5! (now this pawn break would be correct) 41...gxf5 42.h5 ♔d5 43.g6 (another pawn break, with a pawn sacrifice) 43...hxg6 44.h6!, and the h-pawn queens.

39.f5? gxf5 40.h5 ♔e5?

Black's king seems to be approaching the kingside, while keeping his most advanced pawn defended, but there is an obstacle in his way. It is perhaps surprising that the master playing Black (a distant relative of the World Champion, Emanuel Lasker) should make this mistake; but he had an excuse in that the game was played in a simultaneous exhibition of only seven boards and Capablanca was playing at great speed. But it is interesting for us to observe how Black's intuition was affected by the materialistic impulse to maintain the defence of the d4-pawn, even though this is worthless.

Instead, 40...♔e6! was sufficient to achieve the draw: 41.♔xd4 f4! 42.♔e4 f3! 43.♔xf3 ♔f5 and thanks to the fact that the only queenside pawn is a rook's pawn, White cannot win.

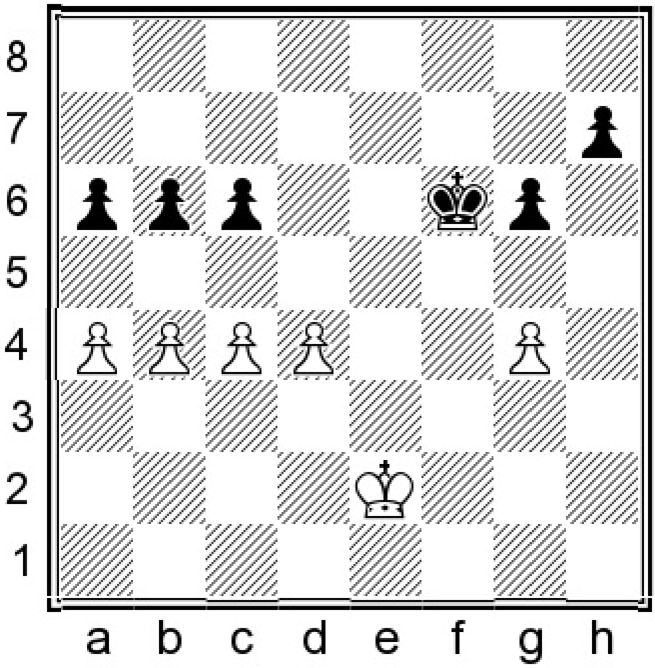
41.h6!

The finesse that decides the game. It prepares to play g5-g6 and now it is impossible for Black to catch the h-pawn.

1-0

The breakthrough theme is fertile ground for compositions, some of which, like this one, raise a smile.

Study by Josef Halumbirek
1962



White to move

1.d5!

The black king is within the square of every white pawn except the a-pawn and this is the one that White has decided to convert into a passed pawn.

1...cxd5

Or 1...c5. In this natural variation, White also has to utilise several breakthrough ideas and finesses of calculation: 2.a5! bxa5 3.g5+!. It is necessary either to decoy Black's king or neutralise his majority: 3...♔e5 (3...♔xg5 4.b5! and queens; or 3...♔e7 4.bxa5 and the protected passed pawn wins) 4.bxc5+–.

2.c5 bxc5

2...b5 3.axb5 axb5 4.g5+!, repeating the manoeuvre. Either the king leaves the square, or the black majority is rendered ineffective: 4...♔e5 (4...♔xg5 5.c6+–) 5.♔e3 ♔f5 6.♔d4 ♔e6 7.c6 ♔d6 8.c7 ♔xc7 9.♔xd5 ♔d7 10.♔c5 ♔e6 11.♔xb5 ♔f5 12.♔c5 ♔xg5 13.b5+–; or 2...♔e6 3.cxb6 ♔d6 4.g5!+–.

3.b5

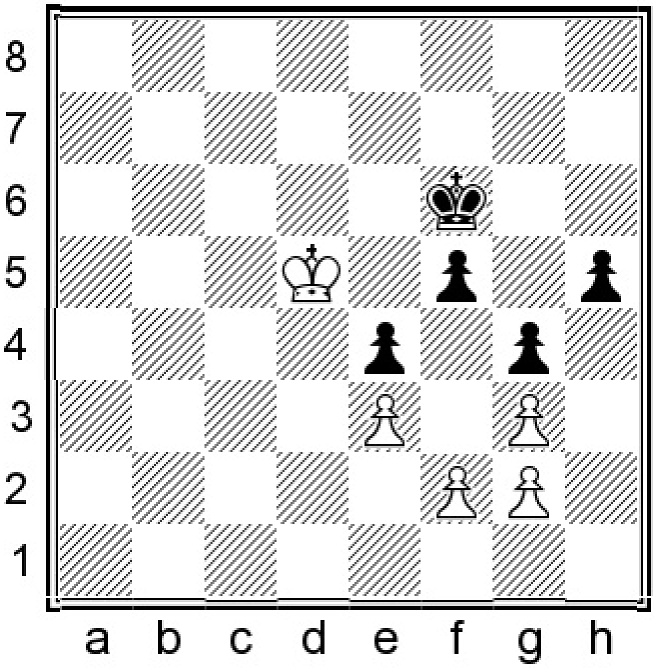
The third sacrifice, which must be accepted.

3...axb5 4.a5

And the a-pawn queens.

But although composed examples can be the most spectacular, there are many cases of a hidden breakthrough in tournament games.

Arturo Pomar 2435
Jordi Cuadras
Olot 1974 (4)



White to move

This example has been widely published and it reminds us of two things which are common in this kind of endgame:

1) doubled pawns make breakthroughs easier to effect, and

2) many cases of breakthroughs occur after an opponent has been overconfident.

But of course, White wanted to win.

42.♔d6??

42.♔d4

or even 42.♔c5 would have prevented the explosion of breakthroughs and achieved a draw.

42.♔d6?? f4!

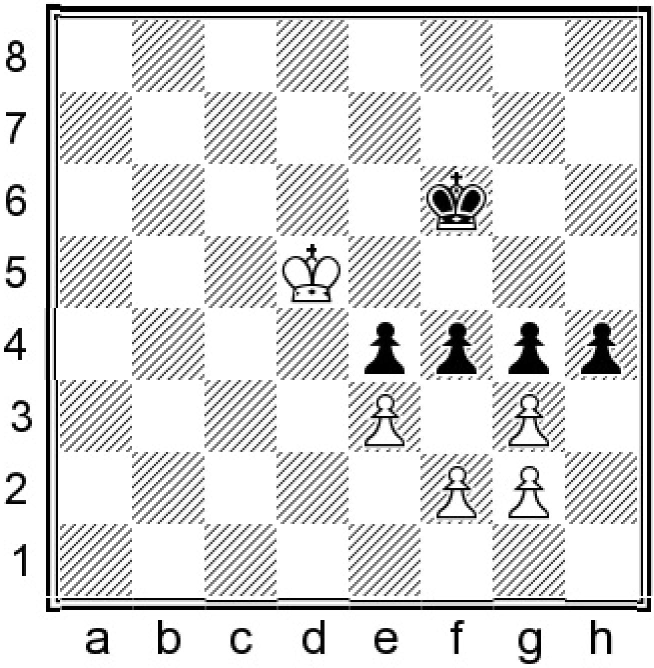
We always find it striking when a pawn advances unsupported to a well-guarded square.

43.♔d5

43.exf4 h4 44.gxh4 g3 45.fxg3 e3 and we have already seen this race; or 43.gxf4 h4, followed ...h3-h2.

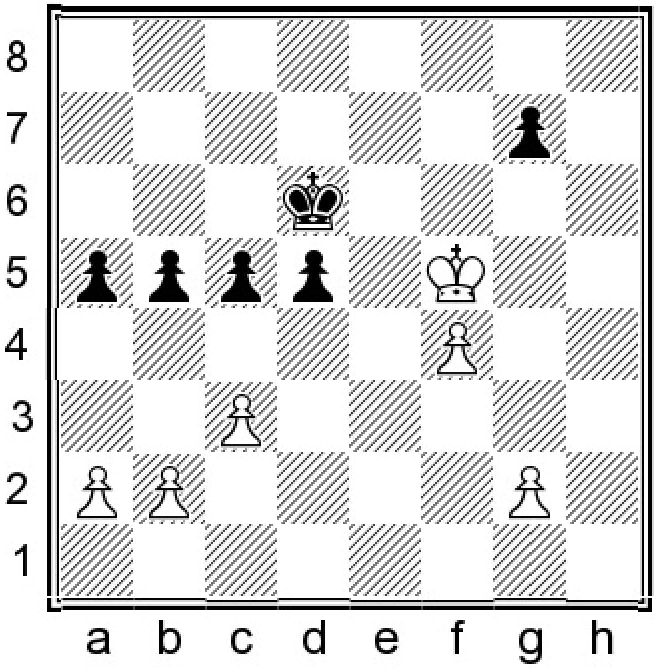
43...h4

An attractive picture, although 43...f3 and even 43...♔f5 also won.



44.♔xe4 f3! 45.gxf3 h3 46.fxg4 h2 47.f3 h1=♕ 48.♔f4 ♕h6+ 49.♔e4 ♕g5 50.♔d4 ♕e5+ 0-1

Boris Grachev 2684
Vladimir Potkin 2606
Russia tt 2009 (4)



White to move

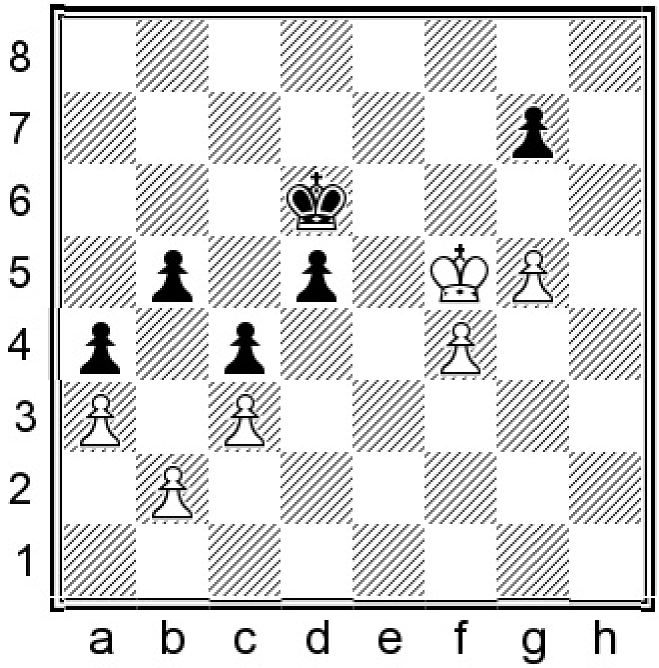
35.a3?

At both high and low levels of the game, the series of decisive pawn breaks often occurs after the opponent has behaved too ambitiously. Here, 35.♔g4!, bringing the king back to keep an eye on the possible passed pawns, is a prudent measure, which usually avoids the double displeasure of an unexpected defeat and undesired immortality, e.g. 35...c4 36.♔f3=.

35.a3? a4 36.g4 c4!

A second observation about this ending is that very often the breakthrough is preceded by the temporary transformation of the main candidate for promotion into a backward pawn, as we saw already in the Capablanca-Lasker game. The purpose here (and almost always) is to prevent the approach of the white king.

37.g5



The spring is about to be released:

37...d4! 38.cxd4

38.♔e4 d3 39.♔e3 ♔e6 and the protected passed pawn wins.

38...b4! 39.♔g6?!

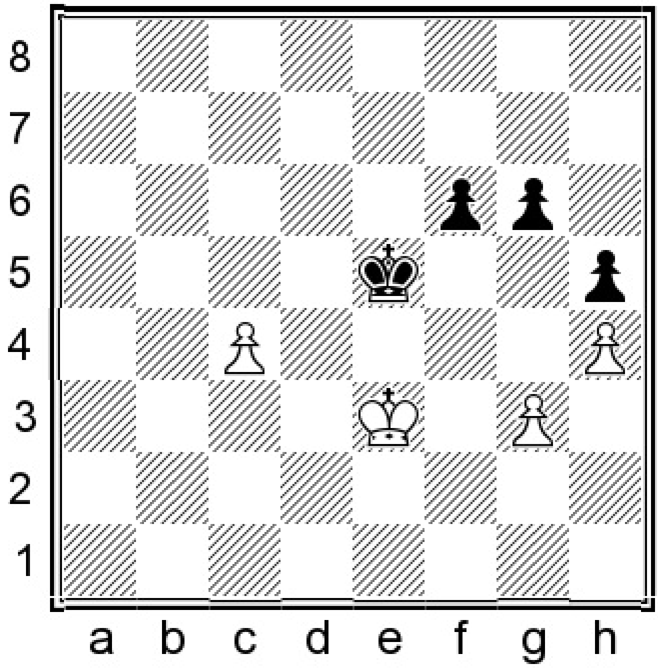
This move is complete garbage, but 39.axb4 loses to 39...c3 40.bxc3 a3, while the most natural move 39.♔e4!? is once again met with the mechanism 39...b3!, still preventing ♔d3 and preparing ...c4-c3, e.g. 40.f5 c3!+–.

39...bxa3 40.bxa3 c3 41.f5 c2 42.♔xg7 c1=♕ 43.g6 ♕c7+ 0-1

The counter-break g3-g4

Among the huge number of breakthroughs which could be imagined to create a more or less unstoppable passed pawn, there is one which deserves special attention, due to the frequency with which it occurs and the ease with which a player can fall into it. That is why we are devoting this little section to it.

Andrei Kharlov 2545
Thomas Ernst 2535
Haninge 1992 (2)



Black to move

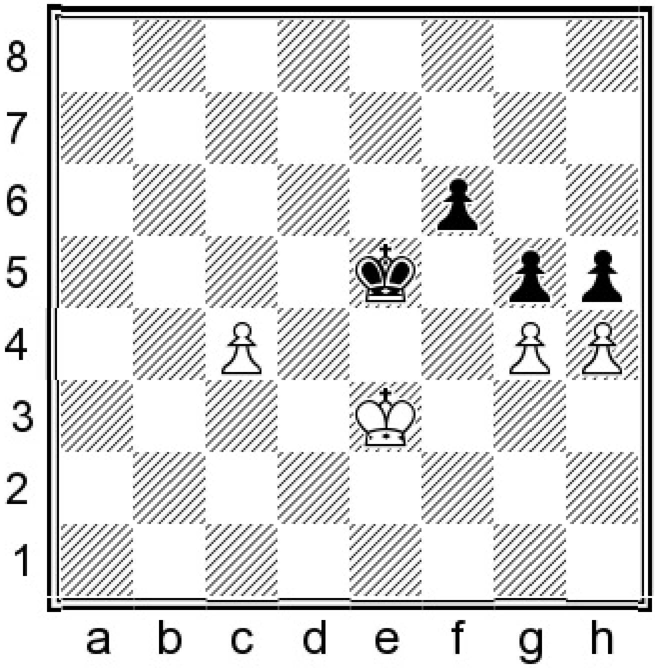
I often alert my pupils to the counter-break g3-g4, especially because it can occur when one of the players is trying to win. To alert them to the danger of being careless, one day I 'invented' this position. The incredible thing is that the invented position existed already and Black committed the very same mistake against which I wished to alert them.

47...g5?

It is logical that Black wanted to counter the danger of White's distant passed pawn as soon as possible, but in this way he creates an even greater danger. The black majority is solid enough to exchange the three pawns for the one on g3, leaving a drawn ending of king and rook's pawn vs king: 47...♔d6 48.♔d4 ♔c6 49.c5 g5 50.♔c4 gxh4 51.gxh4 f5 52.♔d4 f4 53.♔e4 ♔xc5 54.♔xf4 ♔d6=;

47...♔e6 or ♔f5 also draw.

47...g5? 48.g4!



This is the counter-break which has caused so many tears. It is appropriate to analyse the details and observe the circumstances which make it so successful, in particular that the white king has plenty of time to attend to the black passed pawn on the h-file.

48.c5? would allow Black to create a higher-quality majority and win. Perhaps that was what Black had in mind when he played 47...g5: 48...g4! 49.c6 ♔d6 50.♔e4 ♔xc6 51.♔f5 ♔d5 and it is evident that the white king has no time to capture all the pawns: 52.♔g6 (52.♔xf6 ♔e4 53.♔g5 ♔f3 54.♔xh5 ♔xg3–+) 52...♔e4 53.♔xh5 f5! 54.♔g5 f4! 55.gxf4 g3–+; instead, 48.♔f3 ♔d4 49.g4 would lead to mass exchanges and a draw.

48...hxg4

Or 48...gxh4 49.gxh5 h3 50.♔f2+–.

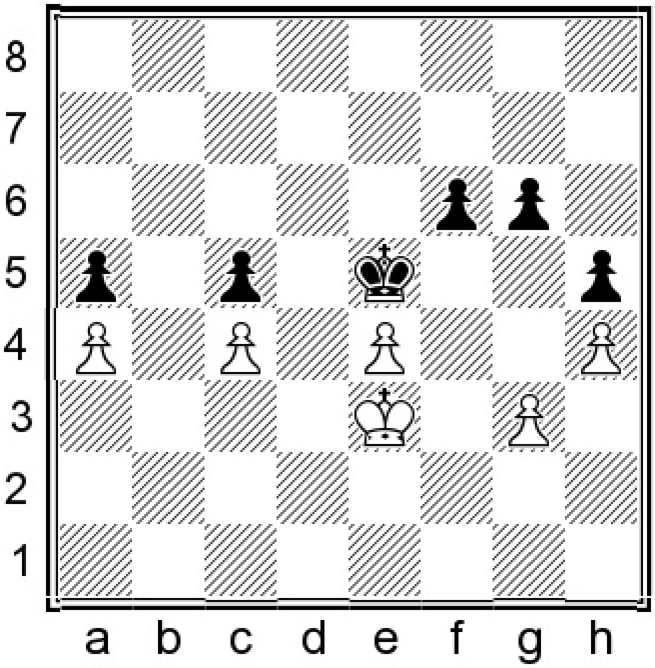
49.h5

The white king can easily deal with the three black pawns, whereas his two separated pawns run far apart from each other, reducing the black king to impotence.

49...f5 50.h6 f4+ 51.♔f2 g3+ 52.♔g2 ♔e4 53.h7 1-0

The counter-break g3-g4 is very much associated with a specific type of isolated pawn, one which, after being blockaded by the enemy king, obliges its owner to adopt waiting tactics with no hopes... or perhaps not.

Sinisa Simic 2200
Predrag Nikolic 2510
Vrsac 1981 (8)



Black to move

Predrag Nikolic was still very young when he played this game and despite displaying great technique, and having done a good job so far, he evidently was unfamiliar with ‘the trick’. Now he decided to conclude the game with the natural pawn break:

44...g5?

This is the ‘losing blow’, committed so many times by the attacker, who is laying siege to the isolated pawn. 44...f5 is the only way to make progress: 45.exf5 gxf5 46.♔f3 ♔d4 47.♔f4 ♔xc4 48.♔xf5 ♔b4 49.g4 hxg4 50.♔xg4 c4 51.h5, but the queen ending, although advantageous for Black, is a draw.

44...g5? 45.g4!

This is the moment when the player with the black pieces is left in a state of shock, and is likely to do something stupid, but his position is already beyond all salvation.

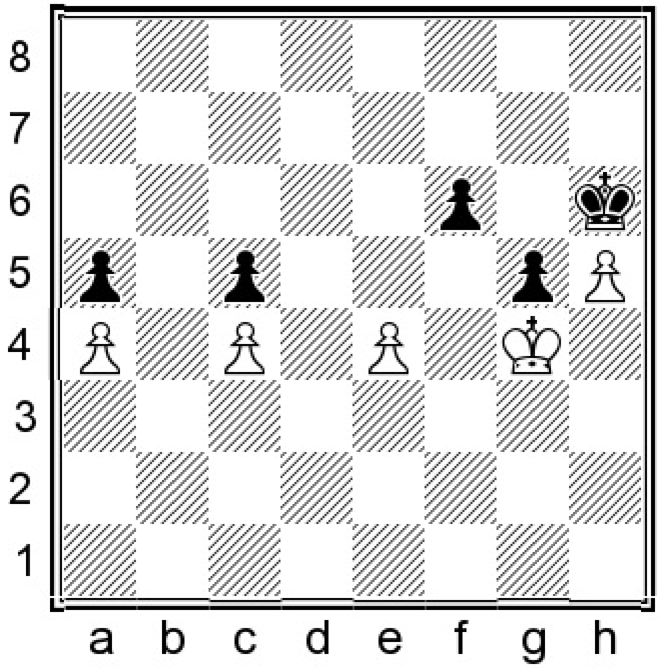
45...hxg4

Here we shall depart from the game and continue with the most logical variation, since the black king can still cope with the white pawn. The game actually continued 45...f5 46.gxh5 f4+ 47.♔f2 1-0.

46.h5 ♔e6

After 46...f5 47.h6 f4+ 48.♔f2 ♔f6 49.e5+ White wins more easily. Once again the two separated pawns defeat the connected pawns: 49...♔g6 50.e6 ♔xh6 51.e7+–.

47.♔f2 ♔f7 48.♔g3 ♔g7 49.♔xg4 ♔h6



Following the counter-break it is natural to arrive here. And it is a second miracle that this position is winning for White.

50.♔f5 ♔xh5 51.♔xf6 g4 52.e5 g3 53.e6 g2 54.e7 g1=♕ 55.e8=♕+

White queens after Black, but with check, and he can now force the exchange of queens and win the new pawn ending.

55...♔h4 56.♕h8+ ♔g3 57.♕g7+ ♔f2 58.♕xg1+ ♔xg1 59.♔e5+–

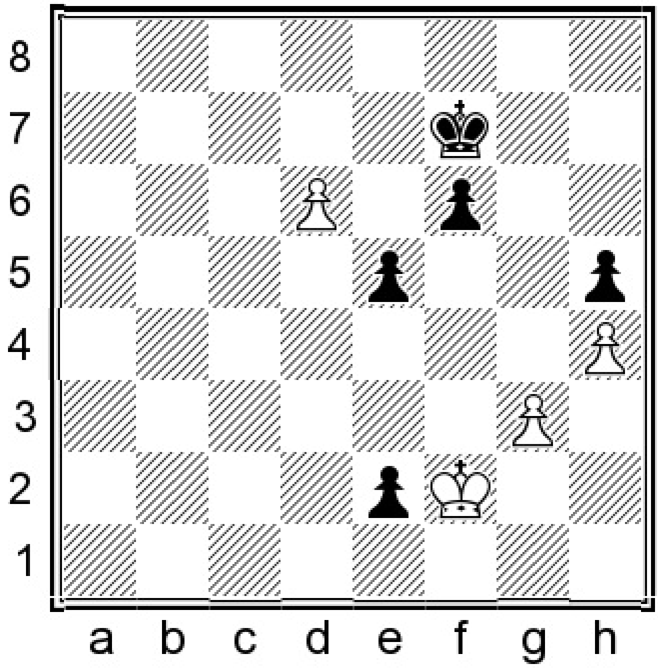
Pattern 9 Separated passed pawns vs connected passed pawns

For that great blockading piece, the king, two separated passed pawns are more difficult to stop than two connected pawns, so that two separated pawns will often defeat two connected ones.

This is a logical consequence of the strengths and weaknesses of the way the king moves and, as we shall see, it gives rise to some paradoxical situations.

Let us begin with a position from a possible variation arising from a game McShane-Carlsen.

Luke McShane 2671
Magnus Carlsen 2826
London 2011 (2; variation)



White to move

74.g4!!

White immediately creates the two separated passed pawns. He must not lose a tempo by capturing the useless pawn on e2, e.g. 74.♔xe2?? ♔e6 75.g4 and now this is too late, because the black king has time to capture the d6-pawn and get back within the square of the other pawn: 75...♔xd6 76.gxh5 ♔e7, and the king enters the square, stops the pawn, captures it and wins.

74.g4!! hxg4

If 74...♔e6 75.gxh5–+.

75.h5!

Now the black king cannot cope with the two passed pawns, whereas the white king can cope with the four black pawns, because they are all very close together.

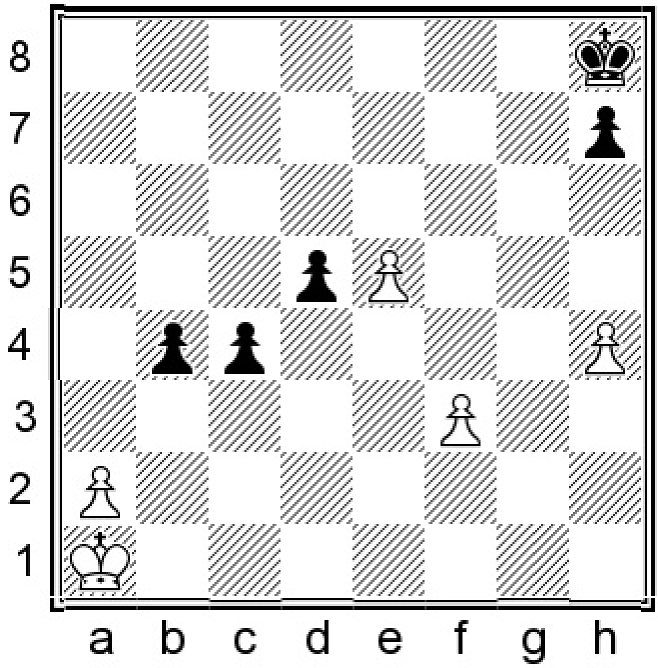
75...e4

75...g3+ 76.♔xe2 g2 77.♔f2 e4 78.h6 e3+ 79.♔xg2 e2 80.♔f2+–.

76.h6 f5 77.h7 ♔g7 78.d7 f4 79.h8=♕+ ♔xh8 80.d8=♕++–

Knowing the principle can allow you to come up with the appropriate plan.

Mark Taimanov
Mikhail Botvinnik



Black to move

In this position, Botvinnik succeeded in creating two separated passed pawns out of his 3 vs 1 majority, and these will prove to be more dangerous than White’s two connected pawns.

48...d4!

There is no time to lose. 48...♔g7 allows 49.a3! bxa3 (not 49...b3? 50.♔b2 and now White’s separated pawns will beat the three black ones) 50.♔a2 and both players will have an unassailable and harmless pair of pawns.

48...d4! 49.e6

It is now too late for 49.a3 in view of 49...bxa3 50.♔a2 d3–+.

49...♔g7 50.f4 ♔f6 51.f5 d3 52.♔b1

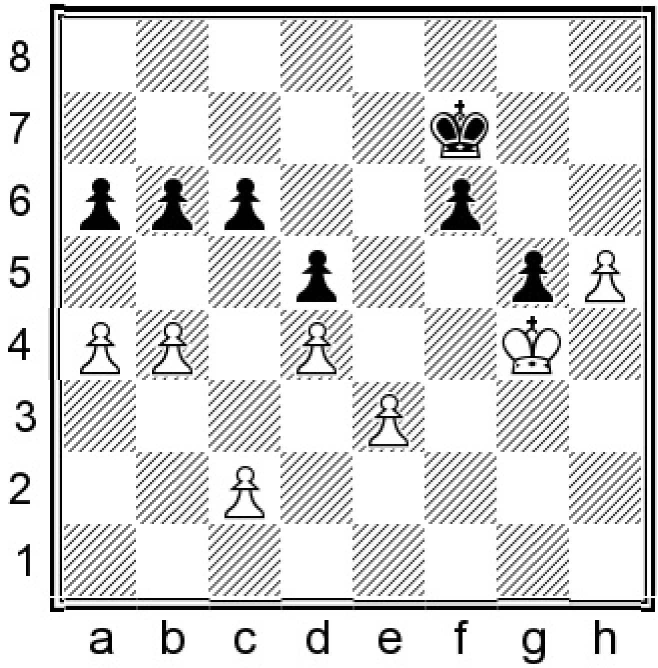
Or 52.♔b2 h5 zugzwang. White has to allow Black to create his two separated passed pawns, as in the game: 53.♔b1 b3 54.axb3 cxb3 55.♔c1 ♔e7–+.

52...h5

White resigned in view of the variation 53.♔b2 ♔e7 54.♔b1 b3 55.axb3 cxb3 56.♔c1 ♔f6 zugzwang. The white king must allow the promotion of one of the two pawns.

Javier Esparza

Pamplona 2012



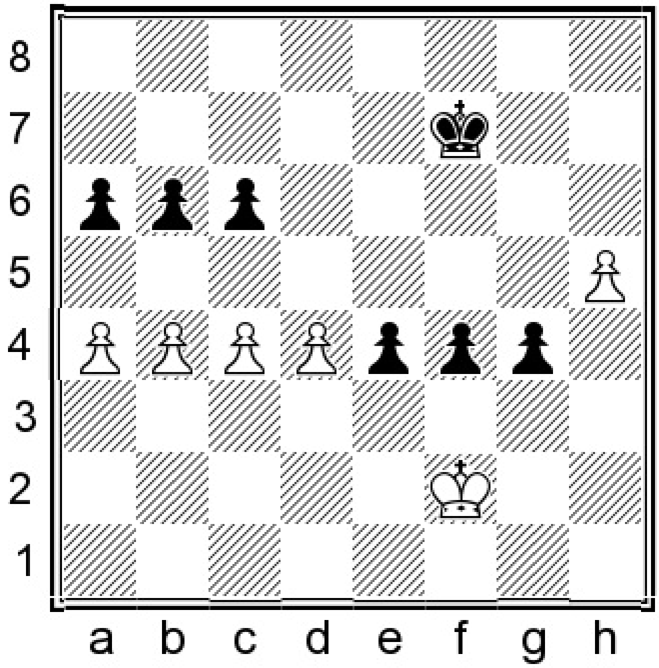
White to move

White already has a passed pawn and can now create another one, but he must do so without losing any time:

35.e4!!

In the game White saw the idea and played 35.♔f5 ♔g7 36.e4!? but now it comes too late and Black ended up winning a queen ending.

35.e4!! dxe4 36.c4 f5+ 37.♔g3 f4+ 38.♔f2 g4



The trio of black pawns is impressive but White’s two distant passed pawns are stronger.

39.d5! cxd5 40.cxd5

Now, on any advance of the three black pawns, the white king must move to the square directly in front of the pawn on the sixth rank.

40...g3+

If 40...e3+ 41.♔e2+–; or 40...♔f6 41.h6 f3 42.h7 ♔g7 43.d6+–.

41.♔g2 e3 42.♔f3!+–

From here the white king has the three black pawns under control but Black is defenceless against the advance of White’s two distant passed pawns.

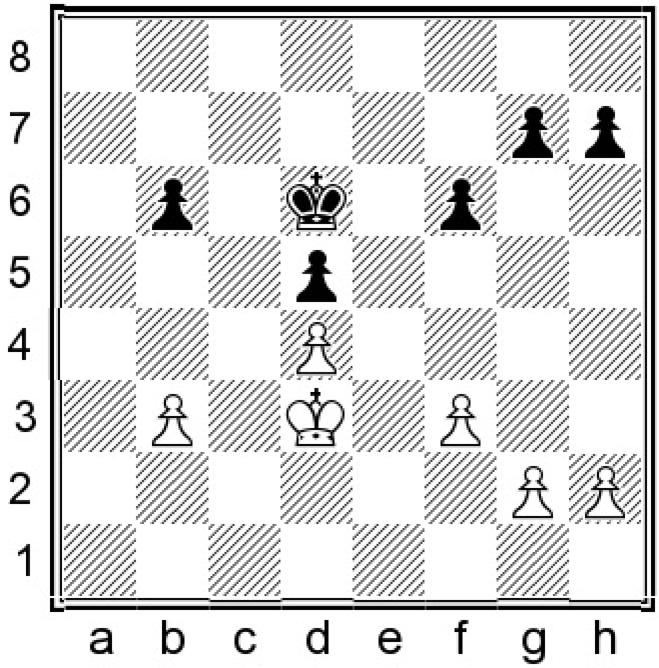
Pattern 10 The dominant king

We shall give the name ‘dominant king’ to the one which has taken up a more advanced position than its counterpart and above all the one which is closer to the bases of his opponent’s pawn islands.

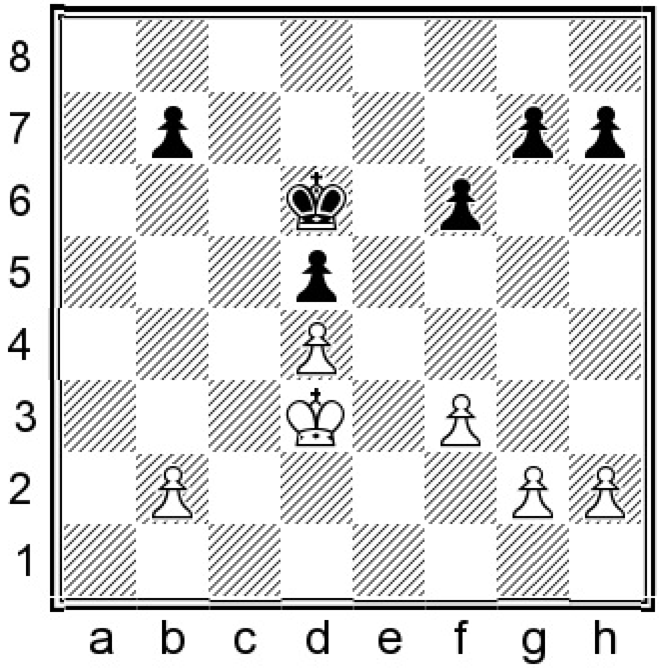
Normally the enemy king must prevent its penetration but sometimes, because of zugzwang, he is unable to do so. Often it depends on reserve tempi and the help of the pawns to cover important squares. A special case of dominant king is when it is situated in front of an isolated (or backward) pawn.

This topic has a strong connection with reserve tempi and with the outflanking mechanism, which we shall see over and over again in this section as well as some others.

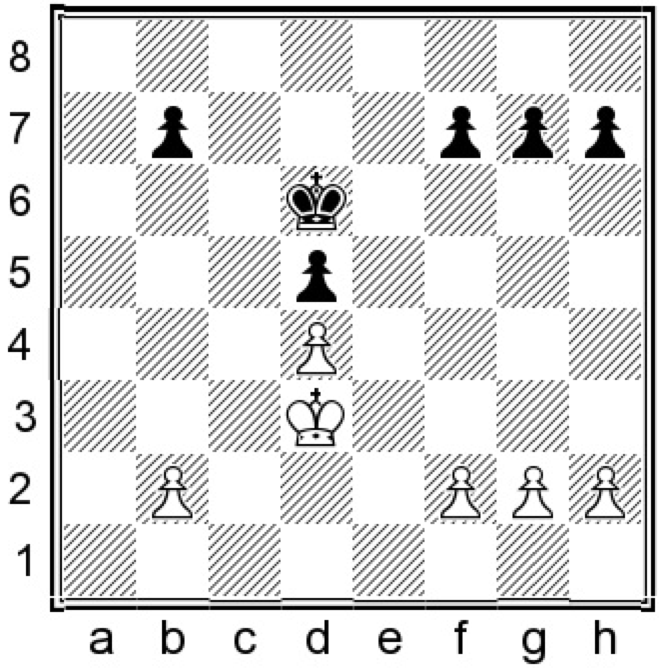
Series: The dominant king



Position 1



Position 2



Position 3

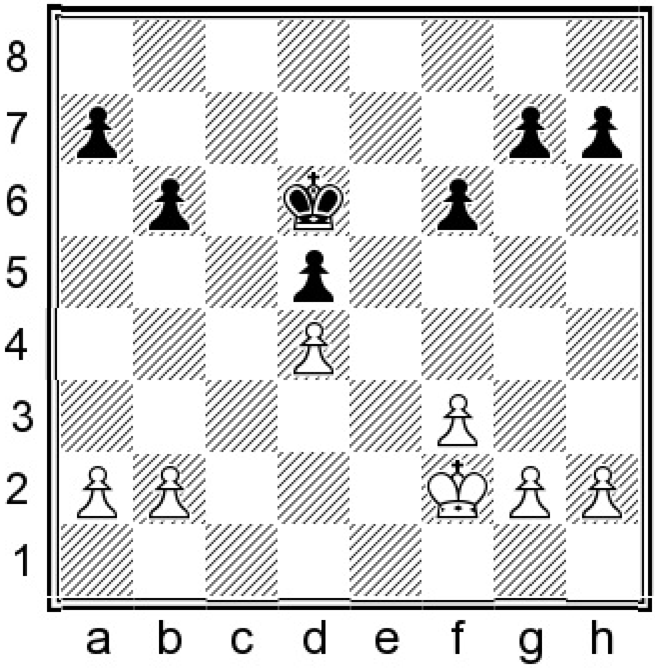
In these three positions, all totally symmetrical (!), the player who moves first wins. This must come as a surprise when we consider the ample drawing margin that exists in many endgames. The reason is that the king that moves first takes up a dominant position on the queenside and is capable of gradually advancing by force into the heart of the enemy position.

For example, in the first diagram the game (with Black to move) could develop like this: **30...♔c6! 31.♔c3 ♔b5** The black king has taken up the dominant position. From now on White cannot avoid having to give ground. **32.g3** Black has enough reserve tempi, but he would win even if he did not have as many, for example: **32...g5 33.g4 ♔a5!** But now he definitely needs to force White to use up his reserve tempi or else retreat. **34.h3 h6 35.♔c2 ♔b4 36.♔b2 b5!** and the black king enters the white position and starts capturing pawns.

In the second position, the events would develop in more or less the same way: **30...♔c6! 31.♔c3 ♔b5 32.♔b3 g5 33.g4 h6 34.h3 b6 35.♔c3 ♔a4! 36.♔c2 ♔b4 37.♔d2 ♔c4 38.♔e3 ♔b3–+**

The third position leads to the same result, although the presence of more reserve tempi requires the examination of more variations.

Cristian Atipov
Asier Alfaro
Pamplona 2016



Black to move

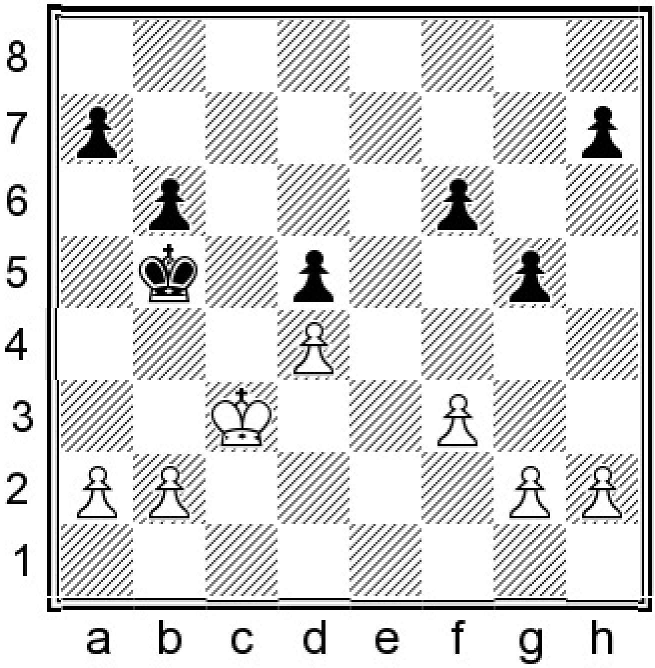
After our study of the above series, it will come as no surprise that the position in this diagram is winning for Black.

30...♔c6! 31.♔e3 ♔b5 32.♔d3 g5?!

Often, especially in games between amateurs, what is most lacking is confidence. With 32...♔b4! the black king takes up the dominant position and wins the game. White has numerous reserve tempi, but logically Black has more. The most curious thing is that they are not even needed: 33.g3 (White is running out of safe pawn moves; 33.b3 ♔a3!–+; 33.a3+ ♔b3–+) 33...g5 34.g4 b5 35.h3 h6 (White's reserve tempi have been exhausted and the black king gains the c4-square, or an even more decisive one) 36.♔e3 (36.a3+ ♔b3 or 36.b3 ♔a3 and Black wins in both cases) 36...♔c4 and the d4-pawn falls.

33.♔c3

The white king has taken up a better position, but...



33...♔a4!

Even here the dominant king wins, although in this case, Black needs the reserve tempi.

The game was different and was decided by the breakthrough theme 33...h5? 34.g3 f5? (still 34...♔a4!) 35.h4? f4!–+ 36.gxf4 gxh4 37.f5 ♔c6 38.f6 ♔d7 39.♔d3 h3 40.♔e2 h2 41.f7 ♔e7 42.♔f2 h1=♕ 0-1.

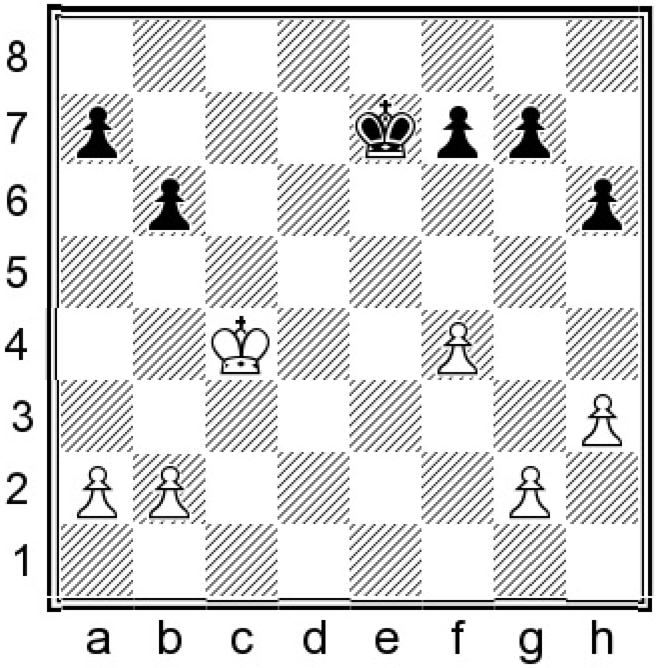
34.a3

Or 34.♔d3 ♔b4! and, as in the main variation, the black king will keep making progress until the completion of its detour.

34...f5 35.g3 g4 36.f4 b5 37.♔c2 b4 38.axb4 ♔xb4 39.b3 ♔a3 40.♔c3 a5

And the white pawns start to fall.

Garry Kasparov 2740
Anatoly Karpov 2705
London WCh 1986 (m/10; variation)



Black to move

This position might have occurred in the tenth game of the third world title match between Kasparov and Karpov, but Black (wisely) did not permit the exchange of the last minor piece, as we shall see in the chapter on bishop against knight. The white king threatens to make its way to a6. Black has three ways to react to this: one consists of preventing it, the other allows it and places the king on b8/a8, while the third is based on counterattack.

35...♔d6

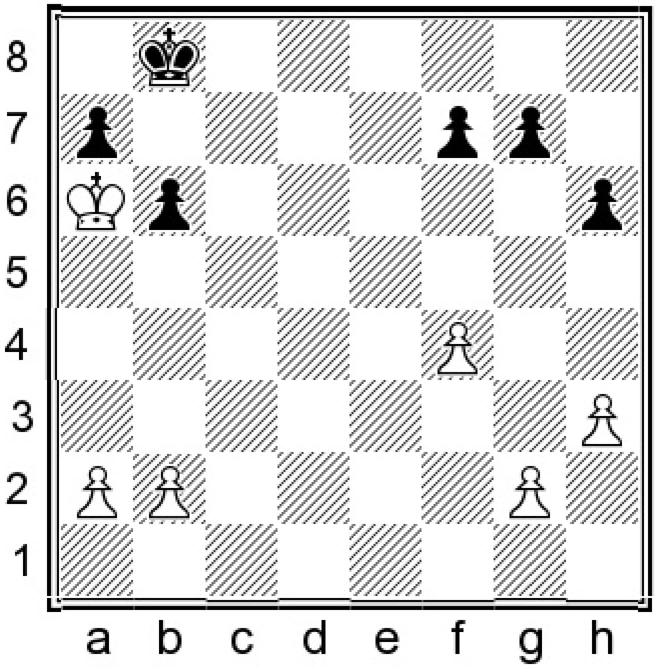
It is necessary to analyse the other two plans separately:

A) 35...a6 36.♔d5 ♔d7. White has a very dominant king and a multitude of reserve tempi. But to win he needs to create new weaknesses and attack them with his king: 37.g4 a5 38.a4 ♔c7 39.h4 ♔d7 40.h5 ♔c7 41.g5 ♔d7 42.gxh6 gxh6 43.♔e5 ♔e7 44.♔f5+–;

B) 35...♔f6! 36.♔b5 (36.g4 ♔e6 37.♔b5? f5!) 36...♔f5 37.♔a6 ♔xf4 38.♔xa7 ♔g3 39.♔xb6 ♔xg2 40.a4 f5 41.a5 f4 42.a6 f3 43.a7 f2 44.a8=♕+ ♔g1. White is unable to give check or pin the black pawn on the seventh rank. He has to content himself with exchanging it for his queen and then beginning a new queening race: 45.♕f8 f1=♕ 46.♕xf1+ ♔xf1 47.b4 g5! 48.b5 h5 49.♔c5 g4= and the pawns queen at the same time.

35...♔d6 36.♔b5 ♔c7 37.♔a6 ♔b8

This position has obvious connections with the classic ending Cohn-Rubinstein, which is studied in many books.



But if White executes the advance on the queenside immediately he will not be able to win, because he will be unable to access the weaknesses on the kingside. It is necessary to weaken the third rank.

38.f5 h5

38...♔a8 39.g4 ♔b8 40.h4 ♔a8 41.h5! (threatening 42.g5) 41...f6 (this weakens the e6-square, which is enough for White to win) 42.a3 ♔b8 43.a4 ♔a8 44.a5 bxa5 45.♔xa5 ♔b8 46.♔b5 ♔b7 47.♔c5 ♔c7 48.♔d5 ♔d7 49.b3! a6 50.b4+–.

39.h4!

39.g4 was criticised by Kasparov, but it also wins: 39...hxg4 40.hxg4 ♔a8 41.g5 ♔b8 42.a4 ♔a8 43.a5 bxa5 44.♔xa5 ♔b7 45.♔b5 ♔c7 46.g6! (also weakening the e6-square) 46...f6 47.♔c5 ♔d7 48.♔d5 a5 49.b3!+–.

39...♔a8 40.a3 ♔b8 41.a4 ♔a8 42.a5 bxa5 43.♔xa5 ♔b7 44.♔b5 ♔c7 45.♔c5 ♔d7 46.♔d5 ♔c7 47.f6! g6

Or 47...gxf6 48.♔e4 ♔d6 49.♔f5 ♔e7 50.b4 a6 51.g3+–.

48.♔c5 ♔d7 49.♔b5 ♔c7 50.♔a6 ♔b8 51.b4 ♔a8 52.b5 ♔b8 53.b6 axb6 54.♔xb6 ♔c8 55.♔c6 ♔d8 56.♔d6 ♔e8 57.♔c7 ♔f8 58.♔d7+–

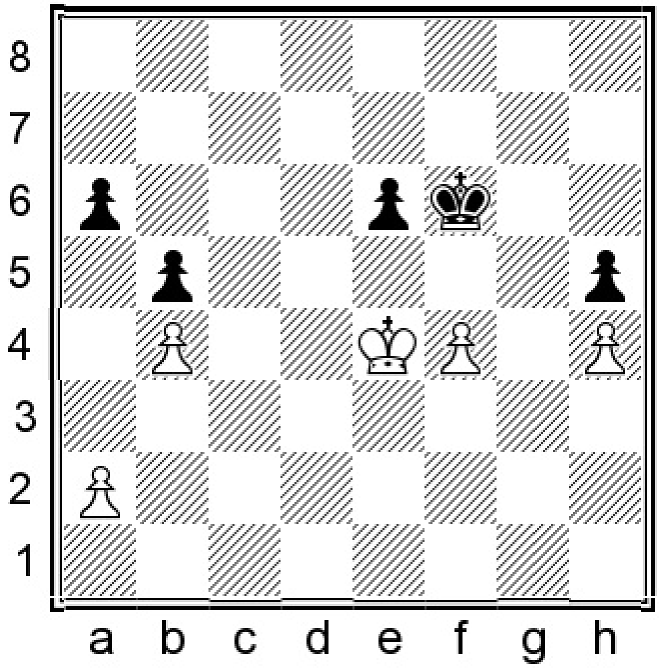
Conclusion from this ending: the position with the dominant king would have won against passive defences and only a very well calculated counterattack would have gained a draw. Karpov showed good judgement in not allowing it.

Pattern 11 Reserve tempi

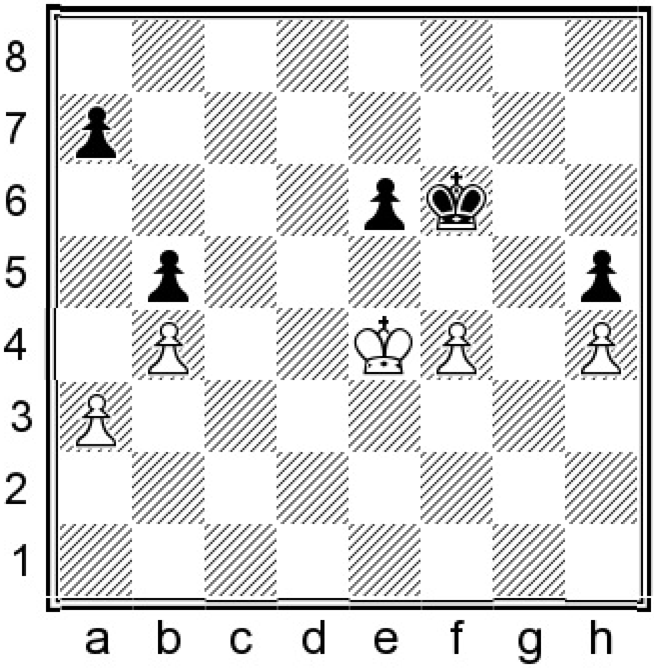
Reserve tempi (also known as ‘spare moves’) are pawn moves that can be made when desired and their aim is to pass the move to the opponent. The importance of reserve tempi is something almost specific to pawn endings and they can change the outcome of a position, not only by half a point but also by a full point.

The reason is that they allow a zugzwang position to be reversed, whether the zugzwang is unilateral or reciprocal. Therefore, if you are in an endgame which is heading for a zugzwang, keep a spare move available, if you can. One way in particular of storing reserve tempi is to leave a pawn on the second rank, so that it can advance either one or two squares, depending on the situation; this is known as Steinitz’s rule.

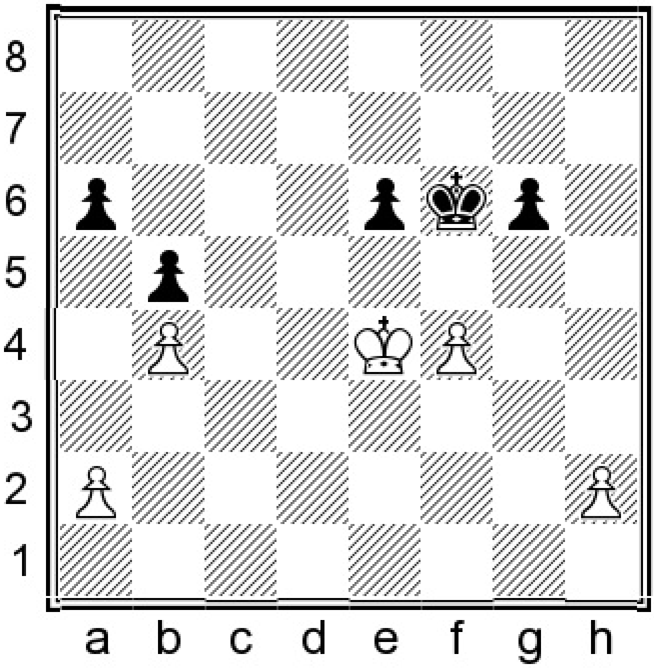
Series: Reserve tempi



Position 1



Position 2



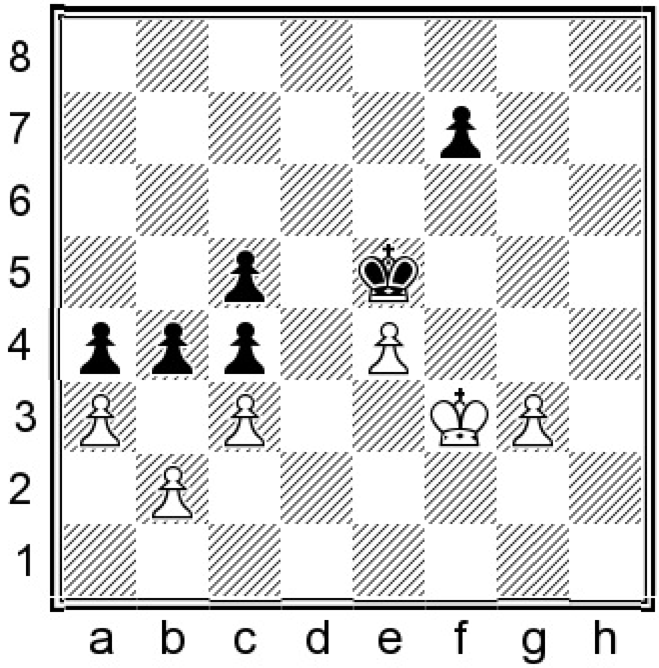
Position 3

In the first position, White wins easily if it is Black's move and by playing **1.a3!** if it is his move, for example **1...♔f7 2.♔e5 ♔e7 3.f5 exf5 4.♔xf5** and White's dominant king reaches the h-pawn.

In the second position, which appears to be the same, it is Black who wins (thanks to his reserve tempo with the a7-pawn), but only if it is White to move; this is logical, since Black's king is one rank further back than White's: **1.♔e3 ♔f5 2.♔f3** The white king tries to impede the black monarch's advance. **2...e5 3.fxe5 ♔xe5 4.♔e3 ♔f5 5.♔f3** and now Black makes use of his reserve tempo and wins with **5...a6!**.

The third position, very similar, is from a game. White wins, thanks to his three reserve tempi, which he exploits one after another to enable his king to keep advancing. Let’s see: **1.h3!** White uses his first reserve tempo and the black king has to concede the e5-square. **1...♔f7 2.♔e5 ♔e7 3.h4!** With this second tempo move, the white king is able to start its detour. **3...♔f7 4.♔d6 ♔f6 5.a3!** And finally with the third tempo move White gains the opposition, which is necessary in order to complete the detour. **5...♔f7** If 5...♔f5 6.♔e7 ♔xf4 7.♔xe6, transposing to the game. **6.♔d7 ♔f6 7.♔e8! ♔f5** Or 7...e5 8.fxe5+ ♔xe5 9.♔e7! ♔f5 10.♔f7 ♔g4 11.♔xg6 ♔xh4 12.♔f6 and the white king arrives first. **8.♔f7 ♔xf4** Or 8...♔g4 9.♔xe6 ♔xh4 10.f5+–. **9.♔xe6! ♔g4 10.♔f6** and Black resigned, as the white king is the first to reach the queenside, Lundvik-Mohammadi, Sweden tt 2004.

Borja Zamarbide
Martin Benitez
La Roda 2005

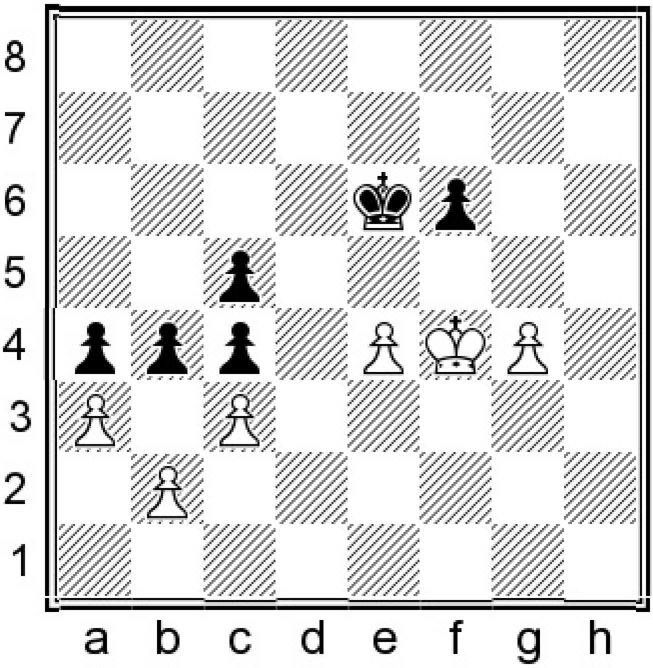


White to move

We have a typical ending arising from the Exchange Variation of the Ruy Lopez. Black’s doubled pawn reduces the value of his pawn majority and White should win. But as we shall see, things are not so easy. It is a position in which intuition tells us that we should hold back the reserve tempo and analysis leads to the discovery that this is necessary:

35.♔e3!

Saving the reserve tempo. With this move we depart from the game, which continued 35.g4? (White is overconfident, thinking that his majority will result in the classic distant passed pawn which wins singlehandedly) 35...f6! (Black prevents 36.g5, while retaining his reserve tempo ...b4-b3, which does not seem essential now) 36.♔e3 ♔d6 37.♔f4 ♔e6.

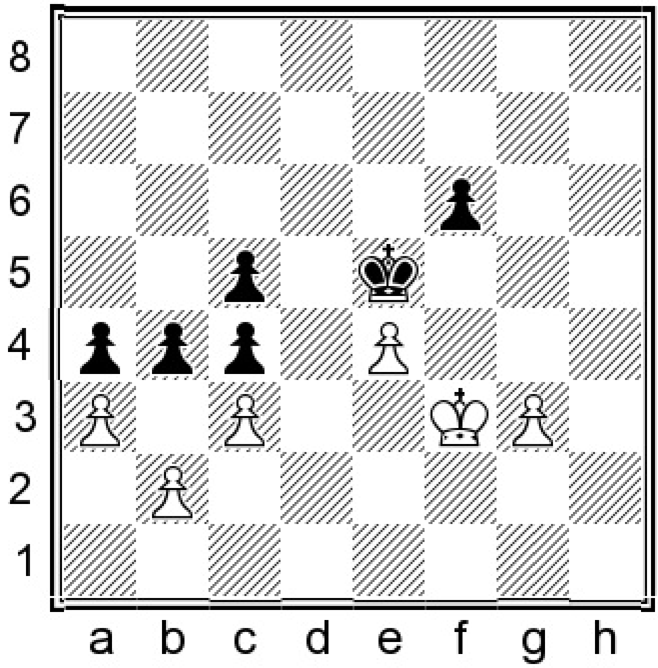


analysis diagram

And White, without a reserve tempo, is unable to gain the f5-square for his king. It only remains to check that the possible pawn breaks do not win: 38.♔g3 (38.e5 fxe5+ 39.♔e4 ♔f6 40.g5+ ♔xg5 41.♔xe5 b3!=) 38...♔e5 39.♔f3 b3 40.♔e3 ♔d6 41.♔f4 ♔e6 42.e5!? (there is no other way to make progress) 42...fxe5+ 43.♔g5 (43.♔e4 ♔f6 44.g5+ ♔xg5 45.♔xe5 ♔g4 46.♔d5? (46.♔e4! maintains the opposition and draws) 46...♔f3 47.♔xc5 ♔e2 48.♔xc4 ♔d2 49.♔d4 ♔c2 50.c4 ♔xb2∓) 43...e4 44.♔f4 ♔d5 45.g5 (a supreme effort, but even in this position the black king reaches c2 in time) 45...e3 46.♔xe3 ♔e5 47.g6 ♔f6 48.g7 ♔xg7 49.♔e4 ♔f6 50.♔f4= ½-½.

35.♔e3! f6 36.♔f3

On the third rank, the white king can wait indefinitely.



36...♔d6!

The black king retreats, ready to respond to 37.♔f4 with 37...♔e6, to prevent the arrival of the white king on f5.

36...b3?! would have given up his reserve tempo and make things easier for White: 37.♔e3 f5 (after 37...♔d6 38.♔f4 ♔e6 this is one of the moments when White must use his reserve tempo: 39.g4!+–) 38.exf5 ♔xf5 39.♔f3 ♔g5 40.♔e4! (White has enough time to start a king race) 40...♔g4 41.♔d5 ♔xg3 42.♔xc4 ♔f3 43.♔b5! (there is no time yet to capture the second c-pawn) 43...♔e3 44.♔xa4 c4 (44...♔d2 45.♔xb3+–) 45.♔b4 ♔d3 46.a4 ♔c2 47.♔a3!+–.

We have reached an interesting moment. Each player has one reserve tempo, and Black is not inclined to give up his, as then he would lose trivially. White must apply the mechanism of triangulation, so that Black is compelled to be the first to use up his reserve tempo.

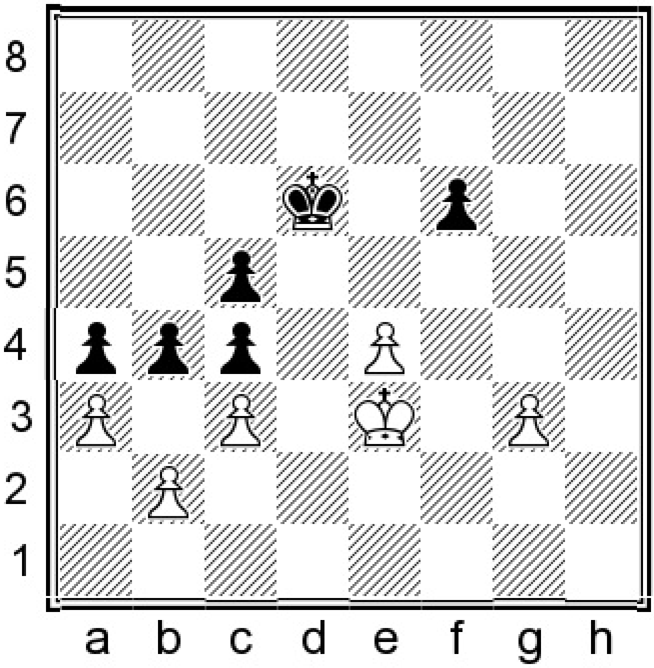
37.♔e2!

37.♔g4 achieves nothing: 37...♔e5 38.♔f3 ♔d6.

37.♔f4 ♔e6 38.g4? would give up White's reserve tempo too soon: 38...b3! Black now uses his and the white king will be unable to reach f5.

37.♔f2! ♔e6 (37...♔e5 38.♔e3 ♔d6 39.♔d2! b3 (39...♔e5 40.axb4 cxb4 41.cxb4 ♔xe4 42.♔c3 ♔d5 43.g4!+–) 40.♔e3 ♔e5 41.♔f3 ♔d6 42.♔f4 ♔e6 43.g4!+–) 38.♔e2 ♔d6 (38...♔e5 39.♔e3 ♔d6 40.♔d2!+–) 39.♔f3 ♔e7 40.♔g4 ♔e6 41.♔f4 b3 42.g4!+–.

37...♔e5 38.♔e3 ♔d6



39.♔d2!

This is the key move. From this square, White threatens to capture the b4-pawn.

The immediate capture is premature, due to a breakthrough we have already seen: 39.cxb4? cxb4 40.axb4 c3! and White must hasten to force a draw by bringing his king nearer: 41.♔d3 cxb2 42.♔c2 a3 43.g4=.

39...b3

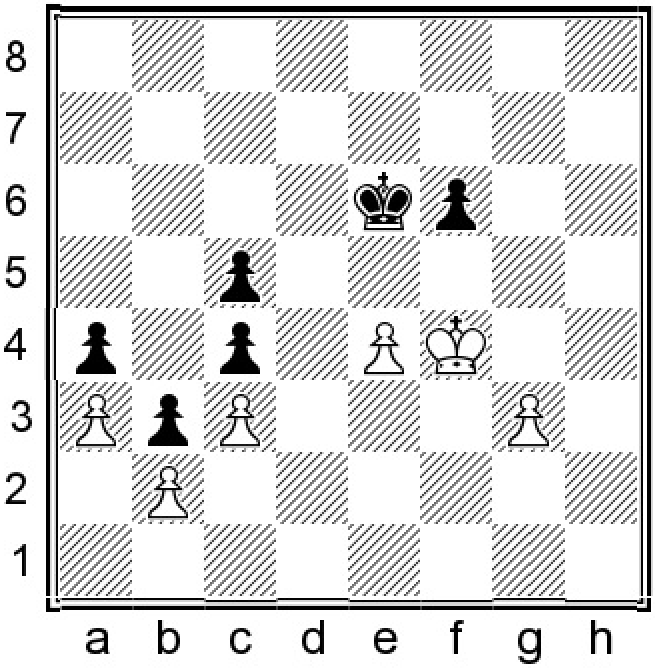
Very reluctantly, Black must give up his reserve tempo, to prevent the capture of his pawn.

Instead, if 39...♔e5 the king fails to arrive in time: 40.cxb4 cxb4 41.axb4 ♔xe4 42.♔c3 ♔d5 43.g4! zugzwang.

40.♔e3

But now White can bring his king to the winning square f5.

40...♔e5 41.♔f3 ♔d6 42.♔f4 ♔e6



The moment to use the reserve tempo has finally arrived:

43.g4! ♔e7 44.♔f5 ♔f7

The white king has taken up the dominant position, after which either of the two pawn breaks will win.

45.e5 fxe5 46.♔xe5 ♔g6 47.♔d5 ♔g5 48.♔xc5 ♔xg4 49.♔xc4 ♔f3 50.♔b4 ♔e2 51.♔xa4+–

The white king captures all the pawns.

Pattern 12 The opposition and its variants

In the next two sections, we are going to go into the theory of corresponding squares, of which basic opposition is the most elementary case.

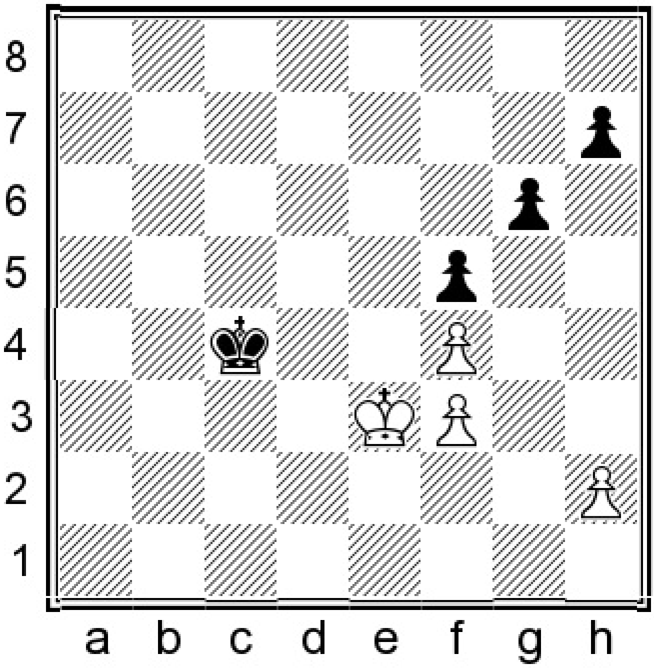
The opposition is (visually) a particular case of the bodycheck, in which one king is placed opposite his opponent, with one square between them, and prevents it from moving forward.

The most basic vertical opposition is studied and applied, usually for the first time, in the theoretical ending of king + pawn vs king. However, it also works in many other theoretical positions, and in non-theoretical positions with a lot of pawns, although it sometimes takes other forms, which obliges us to be flexible in how we apply it, and to remember that the sole aim is to prevent the opposing king from advancing. A fairly common type of opposition is the distant opposition (usually leaving three squares between the kings), while rather more unusual is the diagonal opposition.

In the following example, which was played just as I was finishing writing this chapter, we shall see various different situations related to the opposition.

Ciro Montoya 2185

Roger Lopez 2148
Spanish Championship U14 2020 (8)



White to move

43.♔e2

The diagonal opposition is correct, but the main thing is to keep out the black king.

43.♔d2 also works, because after 43...♔d4 44.♔e2 White regains the opposition.

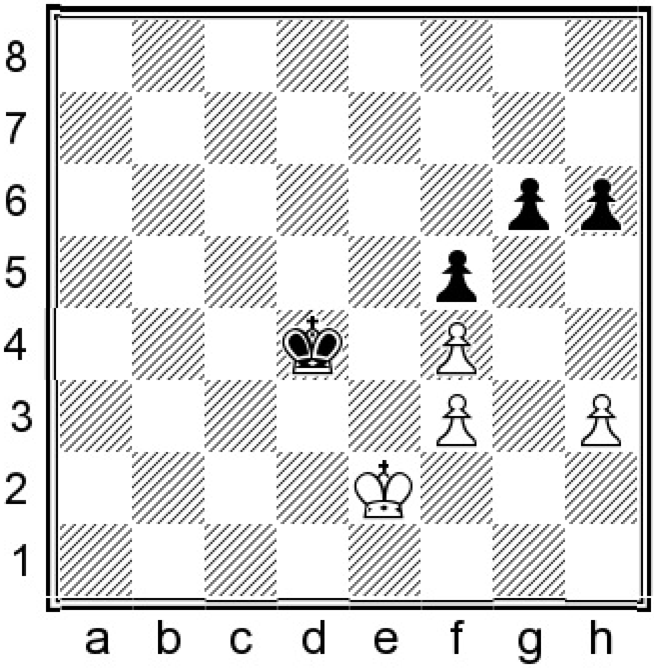
43.♔e2 ♔c3 44.♔e3!

However, frontal opposition (as you can see, horizontal opposition is essentially the same) is definitely necessary here, because otherwise the black king would successfully outflank after gaining the opposition on c2.

44...♔c2 45.♔e2!

This is the key opposition, and now the reserve tempi are the same (two for each side).

45...h6 46.h3! ♔c3 47.♔e3 ♔c4 48.♔e2 ♔d4



49.♔f2?

After a long series of successful oppositions, White abandons the most basic form of opposition, perhaps attracted by a self-stalemating idea which turns out not to work. The problem with this diagonal opposition is that the black king can outflank and White is unable to switch to basic opposition because there is a white pawn occupying the f3-square.

49.♔d2! and if 49...g5 50.fxg5 hxg5 the easiest solution is 51.f4!=.

49...♔d3

The black king outflanks.

50.♔g3 ♔e3 51.♔h4

Now any king move to the f-file stalemates the white king, but it is easy to liberate it and reach a won ending.

51...h5 52.♔g3

Or 52.♔g5 ♔xf3 53.♔xg6 ♔xf4 54.♔xh5 ♔g3 and the black pawn queens much sooner.

52...♔e2 53.h4 ♔e3

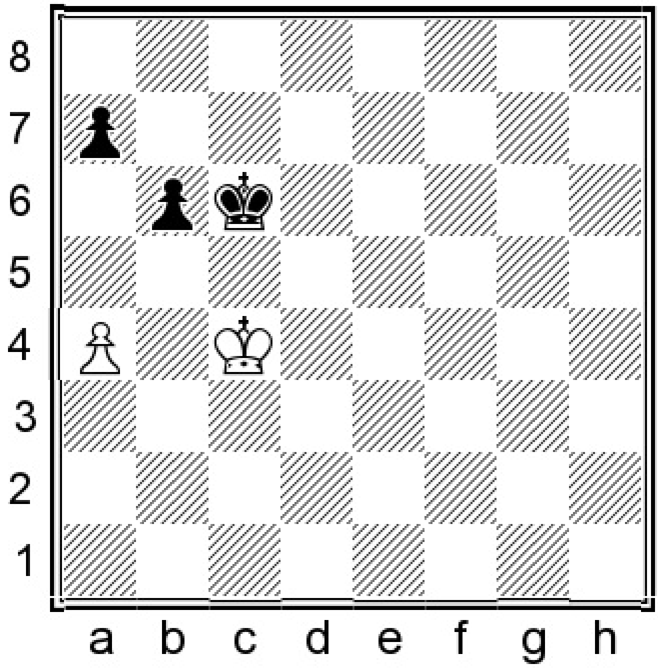
With 53...♔f1! Black would have completed the outflanking manoeuvre and would have captured all three white pawns. The move in the game maintains the winning advantage but we enter a new ending which we shall analyse a bit later, when we cover the topic of corresponding squares.

Distant opposition

Distant opposition is what we call it when the kings face each other on the same rank or file, with an uneven number of squares (and always more than one) between them. There can be two reasons for using this kind of opposition: a) as a means to reach basic opposition and, more often, b) when basic opposition is unviable because of some problem caused by the terrain.

Positions with two pawns against one are a sphere where we frequently encounter the need for distant opposition.

Aleksa Strikovic 2520
Kiril Georgiev 2651
Dos Hermanas 2004 (9)



White to move

This ending has occurred several times and although the draw is simple, it is necessary to know the mechanism for maintaining the opposition when the stronger side's king takes a step backwards.

48.♔b4 a6 49.♔c4 ♚d6 50.♔d4 ♚e6 51.♔e4 ♚d6 52.♔d4 ♚e6 53.♔e4 ♚d7!?

Finally Black decides to try his luck and he takes a step backwards with the king.

54.♔d3!

But White is vigilant and makes use of the distant opposition. Basic opposition with 54.♔d5 loses here to 54...♔c7! and the white king is unable to maintain the opposition: 55.♔d4 ♔d6 56.♔c4 ♔e5 and the black king will complete the outflanking manoeuvre, for example 57.♔d3 ♔d5 58.♔c3 ♔c5

59.♔b3 ♔d4 60.♔b4 ♔d3 61.a5 b5 62.♔c5 ♔c3 63.♔b6 b4 64.♔xa6 b3 65.♔a7 b2 66.a6 b1=♕–+

54...♔c7 55.♔c3! ♔d8 56.♔d2

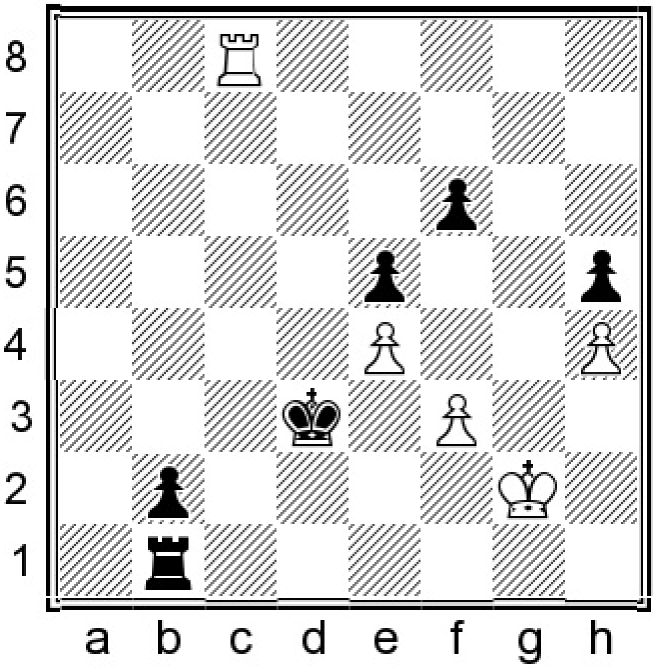
Here 56.♔d4 is also valid.

56...♔e7 57.♔e3 ♔e6 58.♔e4

Draw.

The pattern of a rook stuck in front of a pawn on the seventh rank is one of the most common in practice. Cases of winning attempts will be studied in the corresponding section. It is interesting that one of these is related to the distant opposition.

Position arising in several games



White to move

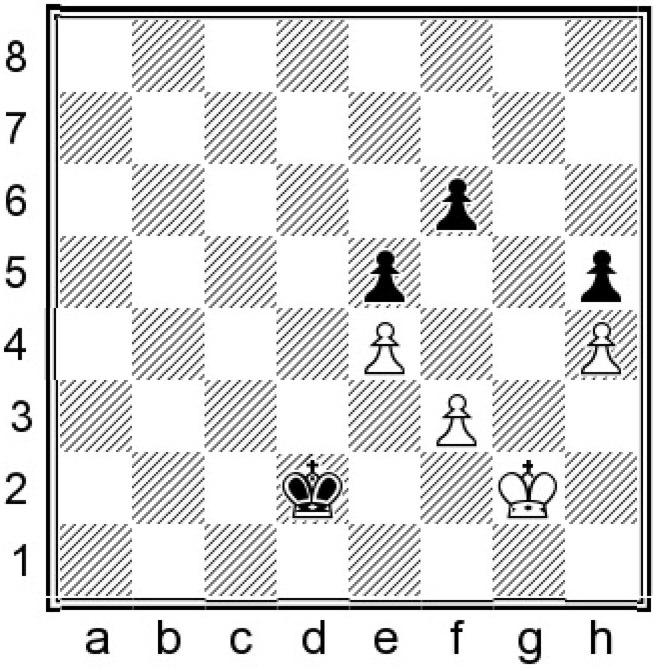
The board position has occurred in at least two games. In the highest level game White took no account of the possible transition to a pawn ending and lost immediately.

1.♖d8+

1.♖b8? ♖e1! 2.♖xb2 ♖e2+ 3.♖xe2 ♔xe2 4.♔g3 ♔f1, completing the outflanking manoeuvre and winning, Inarkiev-Karjakin, Tower of Concord rapid, 2019.

1.♖d8+ ♔e3 2.♖b8 ♔e2

Black tries another manoeuvre, or perhaps he just wants to confuse his opponent. The logical attempt is 2...♖d1 3.♖xb2 (3.♖b3+ ♖d3) 3...♖d2+ 4.♖xd2 ♔xd2.



But White's defence holds here, thanks to the distant opposition. Once again we can confirm that the distant opposition is necessary when there are obstacles in the way of the direct opposition: 5.♔h2!= (5.♔f2? ♔d3) 5...♔e1 6.♔g1 ♔e2 7.♔g2 ♔d3 8.♔h3 ♔c3 9.♔g3 ♔c4 10.♔g2 ♔d4 11.♔h2 ♔e3 12.♔g3 ♔d2 ½-½ Ramesh-Bakre, Nagpur 1999.

3.♖b7 ♔e1 4.♔g1?

Black's trickery bears fruit. Instead, 4.♖b8 ♔d1 5.♖d8+ ♔e2 6.♖b8 leads to a draw.

4...♔d1 5.♔g2 ♖c1 6.♖xb2 ♖c2+ 7.♖xc2 ♔xc2

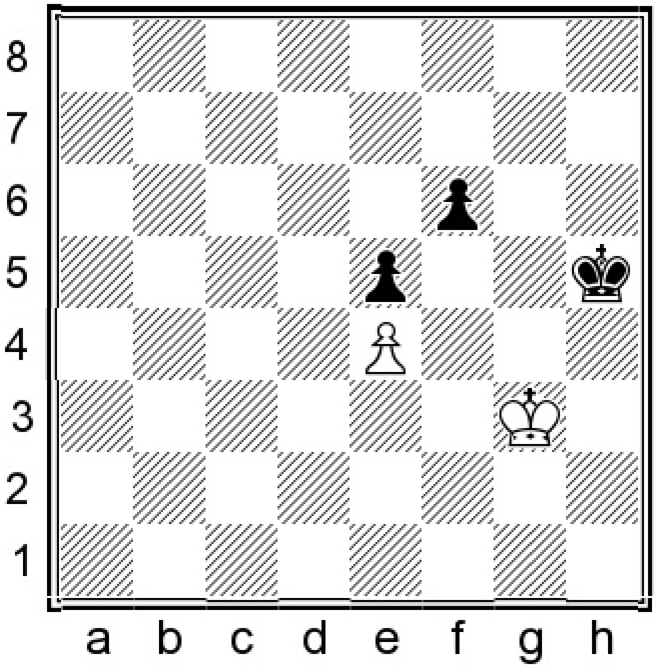
And now it is Black who has the distant opposition and wins.

8.♔g3 ♔d1 9.♔h2 ♔d2 0-1

Brameyer-Möhring, Görlitz 1972.

And finally, a very recent example, played at the highest level, to remind us that 'the mistakes are all there, waiting to be made' (Tartakower).

Alireza Firouzja 2728
Magnus Carlsen 2863
Stavanger 2020 (9)



White to move

As we have already commented in endgames of two pawns vs one, it is very often necessary to use distant opposition.

Currently, the habit of following games online with the analysis engine running takes away much of the excitement. If the engine shows 0.00, then why do they continue the game? And above all, why do we watch it?

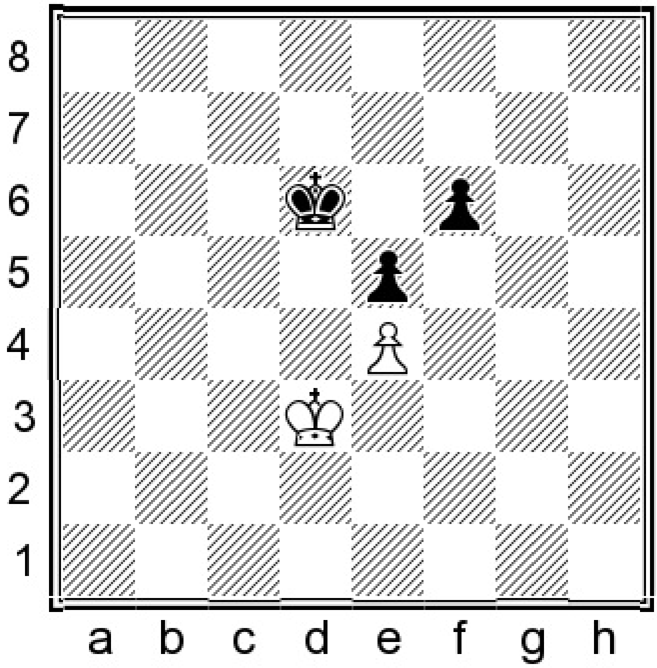
62.♔h3 ♔h6 63.♔h4 ♔g7

It is interesting to note that 63...♔h7 also forces the distant opposition, because 64.♔h5? ♔g7! loses the opposition and the game: 65.♔g4 ♔g6 66.♔f3 ♔h5!–+.

64.♔g3!

The first essential distant opposition. In the next few moves, on the files where there are pawns, it is not so essential.

64...♔f8 65.♔f2 ♔e7 66.♔e2 ♔e8 67.♔e3 ♔d7 68.♔d3 ♔d6



And now we have reached the critical moment. For anyone looking at the position with an engine, everything is obvious: distant opposition and a draw. But the variations are not so easy.

69.♔c3??

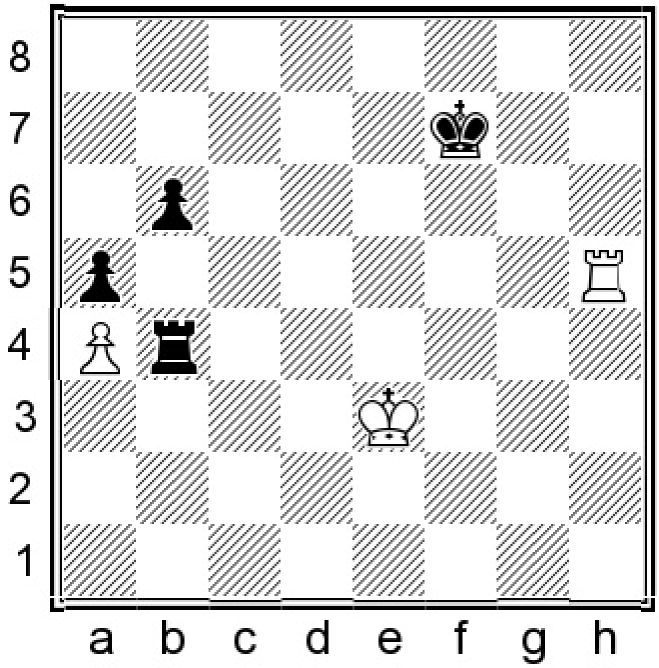
Perhaps this was why they continued playing, because the mistakes ‘are waiting for us to make them’.

69.♔d2! was the correct move, with distant opposition; then if 69...♔c6 70.♔c2! ♔b6 71.♔b2!=.

69...♔c5 0-1

And we end this section with two examples of an ending which forces us to think about all the types of opposition and their usefulness.

Magnus Carlsen
Garry Kasparov
Chess960 Online 2020 (variation)



White to move

This position arose in the most recent game between Carlsen and Kasparov, and although the playing mode was Chess960, that does not invalidate endgame theory.

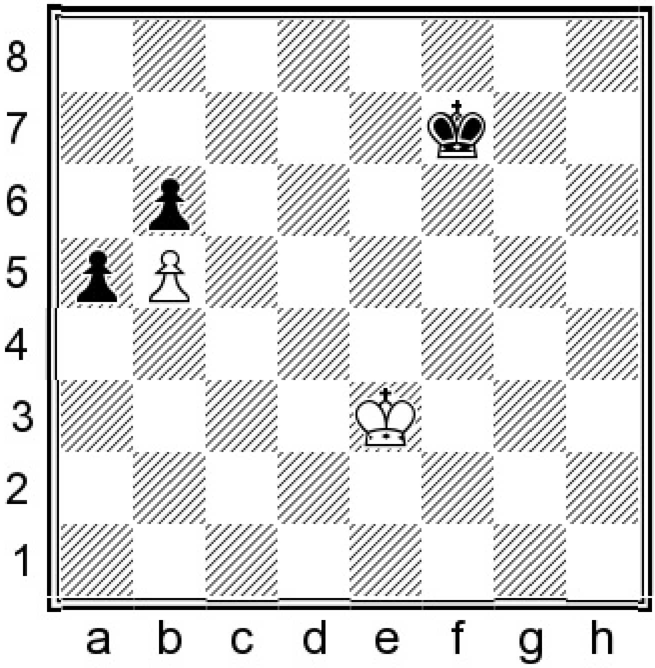
1.♖b5!

Carlsen played the correct 1.♖e5! and drew easily: 1...♔f6 2.♖e4 with a draw after a further ten moves.

1.♖b5!

So all that remains is the question of why Carlsen didn’t enter the drawn pawn ending which results from the move of the main variation.

1...♖xb5 2.axb5



This has led to a position which has occurred several times. It forces us to utilise all the types of opposition and allows us to see in which cases it is necessary (or not).

2...♔e7

Black (with the extra pawn) seizes the distant opposition, but here it fails to achieve anything, because the black king is unable to outflank.

3.♔d3!

The only move to seize either the vertical or diagonal opposition, depending on Black’s next move.

3...♔d7

Or 3...♔f6 4.♔d4!, as we shall see later; or 3...♔e6 4.♔e4! similarly.

4.♔e3

Once again the only square; the distant opposition is irrelevant, because the black king cannot use the c6-square to outflank. Nevertheless, the white king must be attentive to the opponent’s advances.

4...♔e6 5.♔e4!

Now the direct vertical opposition is essential.

5...♔f6 6.♔d4!

And now the diagonal opposition is needed.

6...♔f5 7.♔d5

And now the horizontal.

7...♔g5 8.♔e5! ♔h5 9.♔d5!

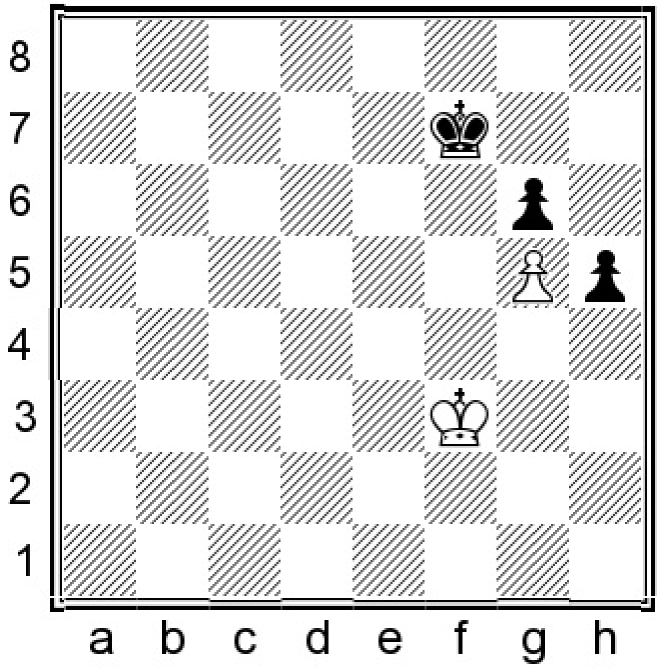
And finally now the distant opposition is indeed necessary, because the black king can outflank via the kingside. If 9.♔d4? ♔h4! 10.♔d3 ♔g5! and the black king outflanks.

9...♔g4 10.♔e4

And once again the horizontal opposition. Black can make no progress: ½-½.

White’s defence might have appeared easy, even obvious, but let’s consider the following example.

Howard Staunton
Elijah Williams
London m6 1851 (4)



White to move

53.♔e3 ♔e6 54.♔e4 ♔d6 55.♔d4 ♔c6

And we arrive at the position of the previous game, but on the other wing.

56.♔e5??

Until the end of this tournament. Staunton was considered the best player in the world. So the best player in the world did not see the diagonal opposition, or perhaps he did not trust it: 56.♔e4!=.

56...♔c5 57.♔f6 h4 58.♔xg6 h3 59.♔f7 h2 60.g6 h1=♕ 61.g7 ♕d5+ 62.♔f8 ♕f5+ 63.♔e8 ♕g6+ 64.♔f8 ♕f6+ 65.♔g8 ♔d6 66.♔h7 ♕f7 67.♔h8 ♕h5+ 68.♔g8 ♔e6 0-1 And Staunton lost the game in this historic tournament.

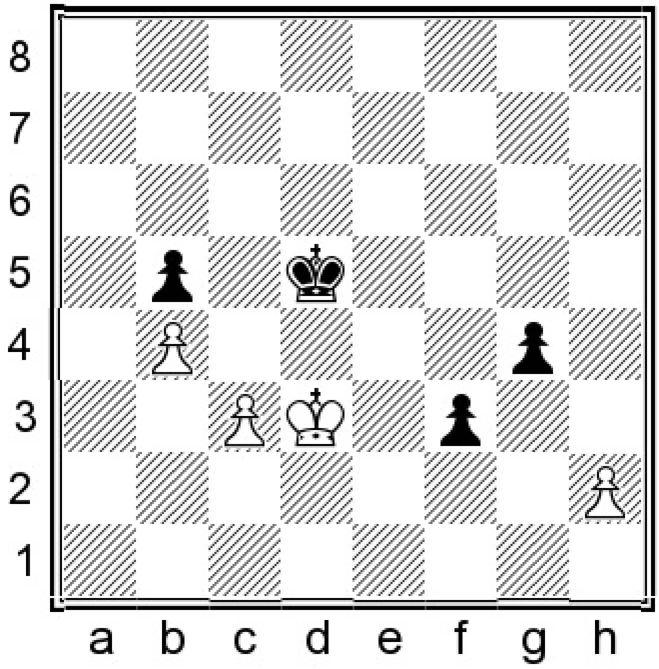
Pattern 13 Triangulation and corresponding squares

Triangulation is a mechanism for transferring the turn to play to the other player, by means of ‘losing’ a tempo. It is achieved by returning the king to the same square it came from, but not in two tempi (as would be natural) but in three, from which comes the name ‘triangulation’. Of course, for it to be effective, the opponent must not be able to imitate the manoeuvre.

Triangulation is one of the most basic cases of *corresponding squares* (the most basic, if we do not include the opposition), but it is the most important one, because it is the only one which is of great practical interest, since it occurs frequently, while the more complex cases of corresponding squares are very rare in practice.

Perhaps some readers will be disappointed that we are not delving more deeply into this subject, since it is of indisputable mathematical interest, but I think that a couple more examples would still be insufficient and that other patterns have much greater practical value. I recommend that interested readers should refer to a book that focuses specifically on this topic: *The Final Countdown* by Willem Hajenius & Herman van Riemsdijk.

Marcos Camacho
José Carlos Ibarra
Granada rapid 2011



Black to move

In this position we have a simple case. The black king is threatening to invade the white position via c4 or f4. If he achieves this, the game is decided in his favour. As a consequence, the white king has to respond to ...♔d5 with ♔d3 and to ...♔e5 with ♔e3. We can call those pairs of squares corresponding squares. But Black has two neighbouring squares (d6 and e6) both touching the corresponding squares, while White has only one (d2). This is precisely the necessary condition which allows the mechanism of triangulation to be exploited.

Let us examine this and explain it step by step:

1...♔e5

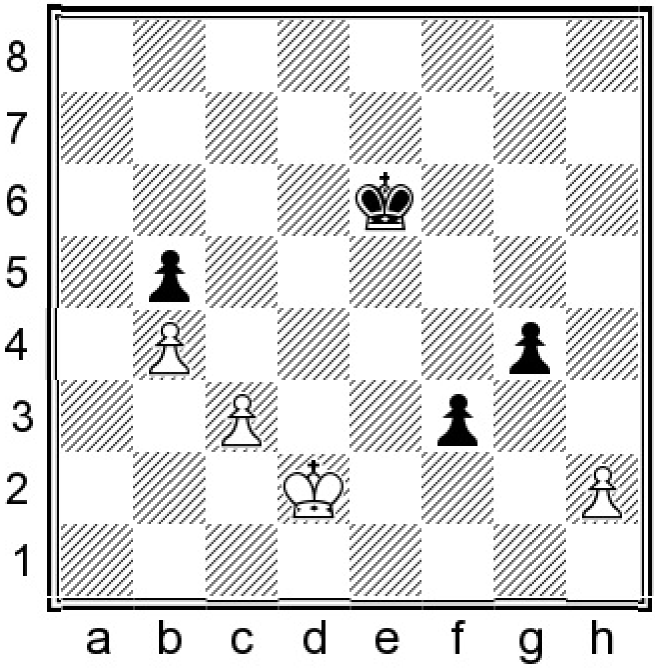
The black king occupies one of the key squares and White responds by moving to the corresponding square.

2.♔e3 ♔e6

The black king moves to one of the adjacent squares.

3.♔d2

For the moment White maintains the correspondence by occupying his only adjacent square.



3...♔d6!

Black moves to the other adjacent square and White is unable to follow suit. In consequence he moves back to one of the corresponding squares.

4.♔e3 ♔e5

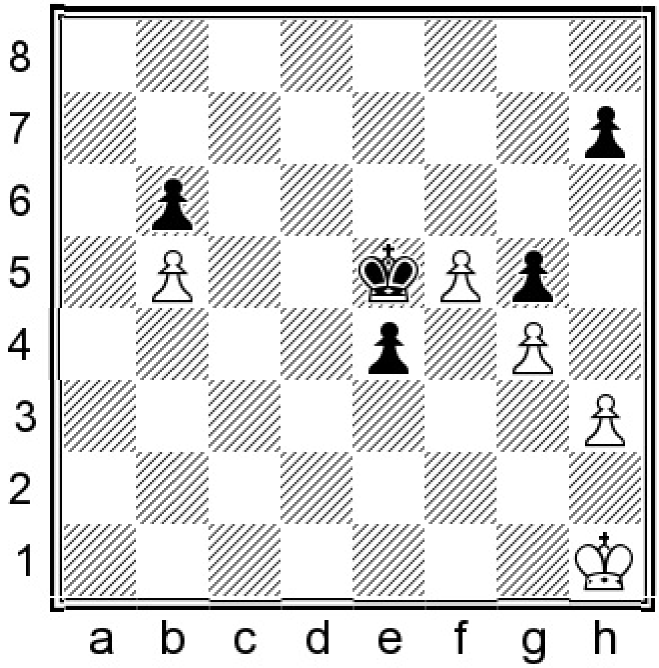
And Black immediately seizes the corresponding square, which in this case coincides with the opposition.

5.♔d3 ♔f4 0-1

Black plays 6...g3 next.

In the next example we shall take a further step in exploring the theory of corresponding squares.

José Carlos Ibarra
Francisco Gomez Gomez
Oropesa del Mar 2001



White to move

In the previous example we have already seen what triangulation consists of. In the current position, Black's king is restricted to the square of the white f5-pawn and also needs to maintain the defence of his own pawn on e4. The white king can only create problems for Black from the queenside and it is natural that it should head over there with no further preparation. The corresponding squares are therefore on the queenside, but it might be useful to discover them now, to determine whether it is already necessary to use the correspondence.

Black cannot allow the white king to reach the d4-square, so Black must answer ♔c4 with ...♔e5 and ♔c3 with ...♔d5. If the white king is situated on b3, it threatens the two squares we have discovered so far, but Black can resist by placing his king on c5, so we can consider this to be the third corresponding square.

Once we have discovered and ‘coloured in’ these squares, we can observe that there is one square (b4 for White and d6 for Black) which allows access to the three corresponding squares and therefore this does not unbalance the battle.

But what is really important is the second observation: the neighbouring squares b2 and c2 are both touching these ‘corresponding squares’, but Black only has one square touching his corresponding squares (staying within the square of the f6-pawn), which is d6. So by ‘oscillating between b2 and c2’, (or triangulating in fact) White will be able to gain control of the corresponding squares and advance into the heart of the black position.

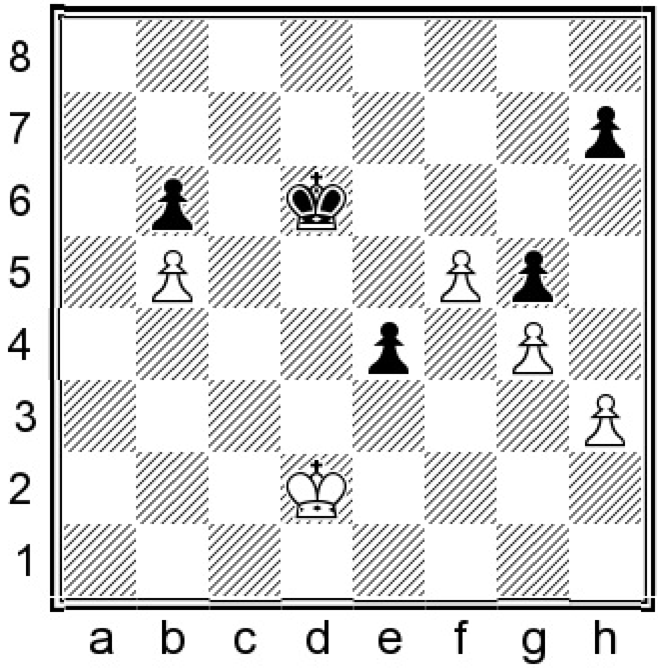
There is also another circumstance, one that does not change the result but could prolong the game: Black has reserve tempi with the h-pawn (he actually has three), but each time he is forced to use one of these, he will only make White have to repeat his manoeuvres to gain the corresponding squares once again.

We can therefore establish the following rule: when a player has two neighbouring squares, both touching a group of corresponding squares, but the opponent has only one square touching, or if he has two that are not neighbouring, then the first player can ‘gain the correspondence’. This is the most important rule of corresponding squares, and the only one we are going to extract.

48.♔g2 ♔d6

48...♔d5 49.♔f2 ♔d6 50.♔e2 ♔d5 51.♔d2 ♔d6 52.♔c3 ♔d5 53.♔b3 ♔c5 (53...♔d6?! 54.♔b4) 54.♔b2 ♔d6 55.♔c2 ♔c5 56.♔b3 ♔d6 57.♔b4 ♔d5 58.♔c3 ♔e5 59.♔c4! and finally it is zugzwang: 59...h6 (Black concedes his first reserve tempo) 60.♔c3 ♔d5 61.♔c2 and it starts all over again.

49.♔f2 ♔d5 50.♔e2 ♔d6 51.♔d2



The white king draws nearer and we have reached a key moment. We recall that Black must answer ♔c4 with ♔e5 and ♔c3 with ♔d5. The problem is that White has two squares to gain access to c3 and c4 but Black has only one square to reach e5 and d5. Black loses because he does not have two reserve squares to access the corresponding square. It is worth comparing this with a similar position but with the blocked b-pawns moved one file to the left; we shall do this below and find that the result is a draw.

51...♔d5?!

Facilitating the first zugzwang.

51...♔e5! offered greater resistance, but after 52.♔c3 ♔d5 53.♔b3 ♔c5 (or 53...♔d6 54.♔b4! ♔d5 55.♔c3 h6 and White has to start again) 54.♔b2 ♔d6 55.♔c2 ♔e5 56.♔b3 ♔d5 57.♔c3 the first triangulation is complete and White has conquered the first corresponding square. Black is now forced to use up one of his three reserve tempi: 57...h6 and White starts the process all over again.

52.♔c3 h6

52...♔c5 53.f6!+–.

53.♔d2 ♔d6 54.♔c2 ♔d5 55.♔c3 ♔e5 56.♔c4

Once again White ‘gains the correspondence’ and Black must use up another tempo move.

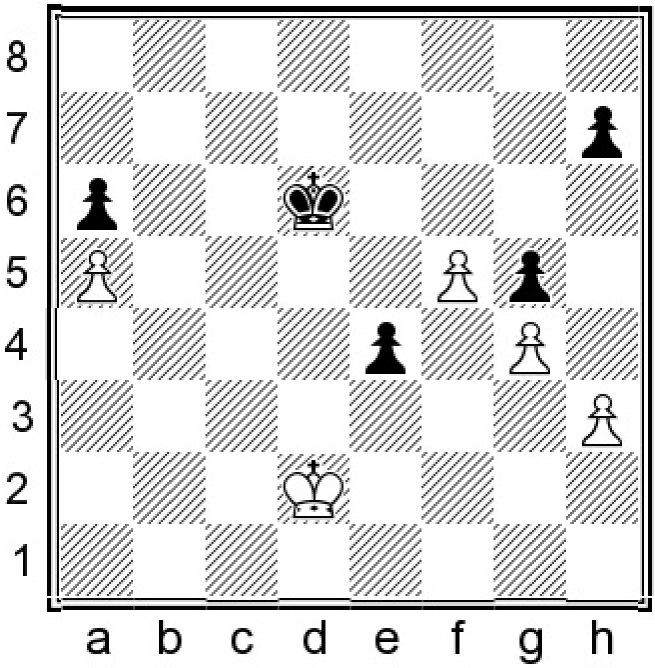
56...h5 57.♔c3 hxg4 58.hxg4 ♔d5 59.♔d2 ♔d6 60.♔c2!

Completing the third triangulation.

60...♔e5 61.♔b3 ♔d6 62.♔b4 ♔d5 63.♔c3 ♔c5 64.f6 ♔d6 65.♔d4

And White wins.

Diagram for comparison



I think it will be quite easy (although laborious) for the reader to establish the three corresponding squares, check that Black has enough connected adjacent squares, and verify that this ending (almost identical to the previous one) is a draw.

Conclusions

We can draw three conclusions here:

1) Triangulation is a method for 'grabbing' the correspondence from the opponent.

2) If the correspondence cannot be 'grabbed' (by means of triangulation or other manoeuvres), then everything will depend on who gains it first.

3) When a player has two neighbouring squares both touching a group of corresponding squares, but the opponent has only one such square, or if the two squares he has are not neighbouring, then the first player can 'gain the correspondence'.

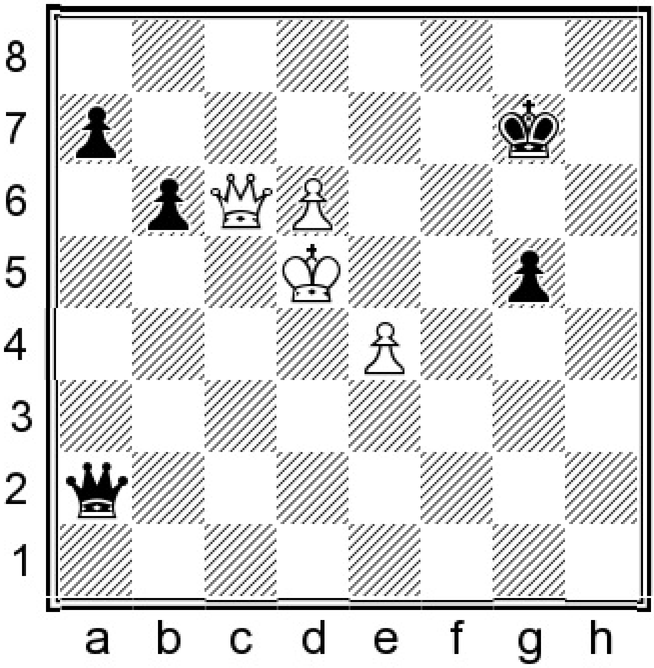
Pattern 14 Tactical tricks in the race to queen a pawn

In many endgames there comes a moment when two (or more) pawns are racing, and everything depends on the most precise calculation. But in order to calculate without making a mistake it is very useful to know the thematic tricks. We are going to look at five of the most common of these.

The greatest benefit from this section will be achieved if you can fix in your memory the diagrams of the critical moment, which are presented in a different format.

1. The mate with two pawns on the seventh rank

Miguel Illescas 2545
Felix Izeta 2425
Lleida 1991 (7)



White to move

73.♕c4!

73.♔e5 would also have won, but White knows the typical mechanism and correctly calculates its application.

73.♕c4! ♕xc4+ 74.♔xc4 ♔f7

Black has separated pawns vs connected pawns, but the former are very advanced.

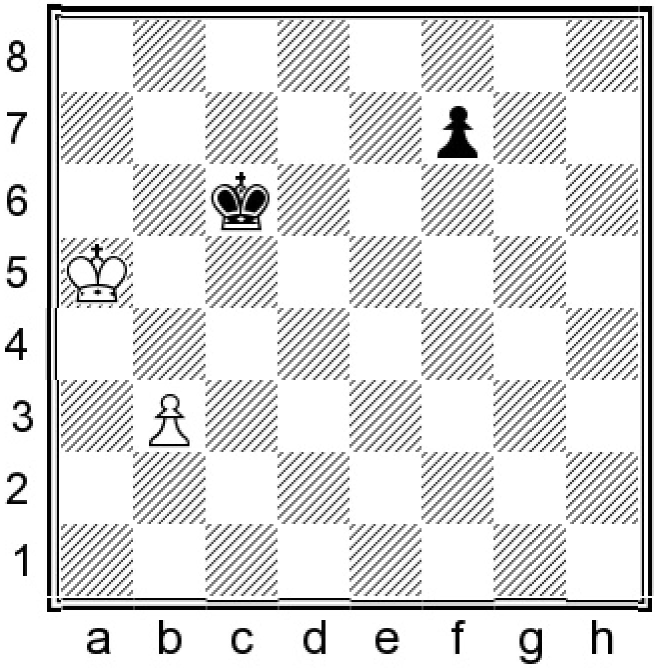
75.♔d5 g4 76.d7 ♔e7 77.♔c6

And Black resigned in view of the inevitable finish: 77...♔d8 78.♔d6 g3 79.e5 g2 80.e6 g1=♕ 81.e7#.

It is always nice to end with this mate when the opponent has just queened. Perhaps you thought that this only happens in composed studies, but it also occurs in real games.

2. Attraction to the fatal square

Ljubomir Ljubojevic 2510
Walter Browne 2500
Amsterdam 1972



Black to move

Overconfident, White had made a mistake by exchanging rooks. Black, trusting his opponent, also believed the position was drawn. But in fact he could have won, by forcing the white king to occupy the square where it will be checked by Black's new queen:

39...♔d5!

The game continued 39...f5? 40.♔b4 f4 41.♔c4 ½-½.

39...♔d5! 40.b4

40.♔b4, trying to enter the square of the white pawn, is met with a bodycheck: 40...♔d4!, and Black wins.

40...f5 41.b5 f4 42.b6 ♔c6!

The white king is drawn to the fatal square. Black has lost two tempi with the king and ends up queening after White, but he queens with check and is able to force mate against the king on the edge:

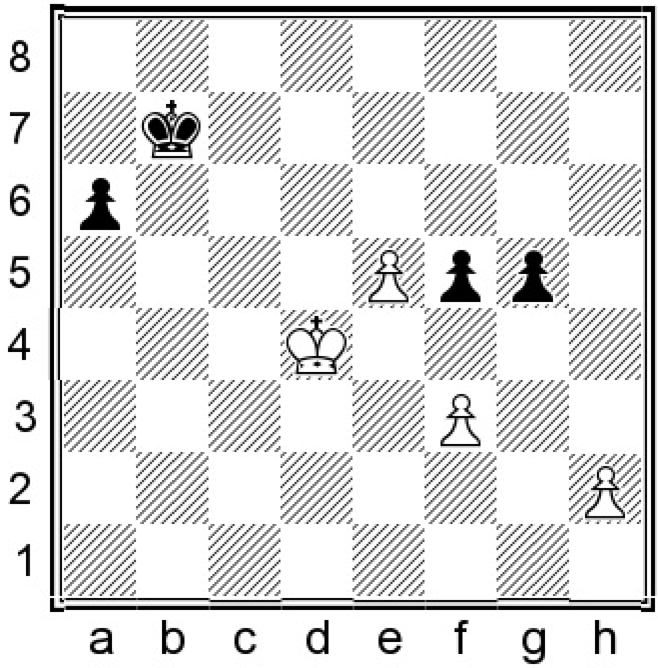
43.♔a6 f3 44.b7 f2 45.b8=♕ f1=♕+

Followed by mate.

3. Queening with check

The possibility of promoting with check can be decisive when both players' pawns reach the seventh rank at the same time.

Vasily Ivanchuk 2766
Anish Giri 2714
Wijk aan Zee 2012 (9)



White to move

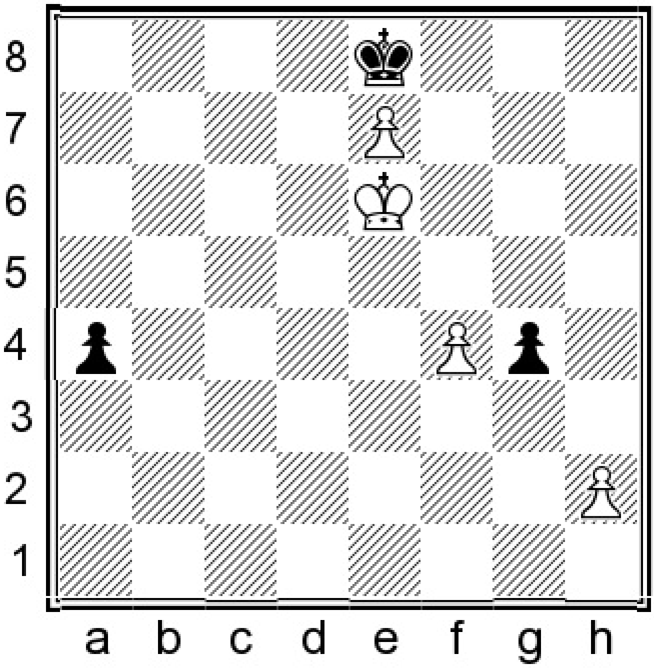
In this example, Ivanchuk succeeds in creating a work of art superior to many composed studies:

52.f4!

Not 52.e6? ♔c7!, when the king arrives in time and Black wins, thanks to his distant passed pawn, e.g. 53.♔e5 ♔d8 54.♔xf5 a5.

52.f4! gxf4

If 52...g4, 53.e6! wins. This variation, which appears similar to the previous one, is now winning for White, thanks to the tempo gained by the f-pawn: 53...♔c8 54.♔e5 ♔d8 55.♔xf5! a5 (55...♔e7 56.♔e5 a5 57.f5 a4 58.♔d4+–) 56.♔f6 ♔e8 57.e7 a4 58.♔e6.



analysis diagram

And White is in time to deliver the mate with two pawns on the seventh.

53.h4 a5

Now the simple advance of the two rook's pawns would lead to simultaneous promotion and a draw.

54.e6! ♔c7

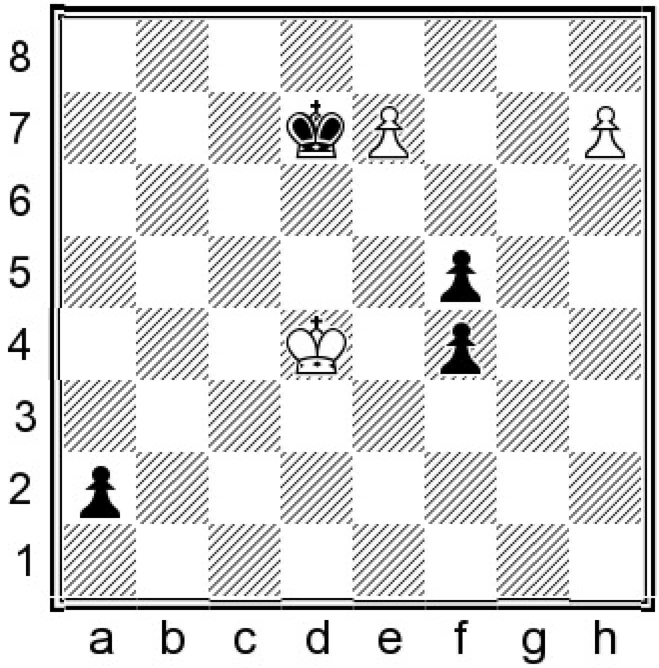
Black must bring the king closer. Now if White advances the e-pawn, the black king will not only capture it, but will also enter the square of the h-pawn.

55.h5!

Once again, it is essential to advance the other pawn, so that the black king is unable to enter its square. Now we can see the overall idea. White advances one pawn at a time, to prevent the black king from entering the square of the h-pawn but at the same time ensuring that the other pawn queens with check, attracting the black king to the eighth rank and enabling White's h-pawn then to queen with check.

55...a4 56.e7! ♔d7 57.h6 1-0

The game could have continued: 57...a3 58.h7 a2.



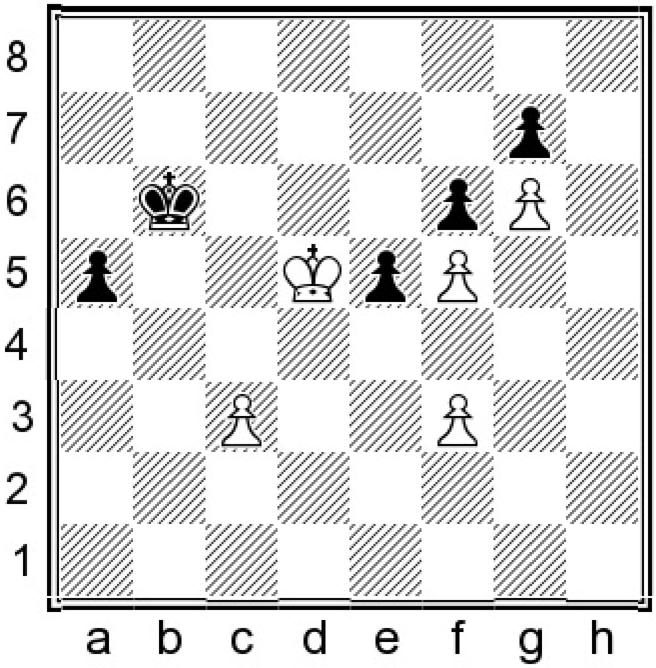
analysis diagram

And now, with the three pawns all on the seventh rank, there follows the double promotion with check: 59.e8=♕+ ♔e8 60.h8=♕+.

4. Evading the check

There is a quite typical situation, which at first sight appears to be a draw but is decided by a clever king manoeuvre, preventing the enemy pawn from queening with check:

Ricardo Montecatine 2345
Jesus de la Villa 2450
Dos Hermanas 1992



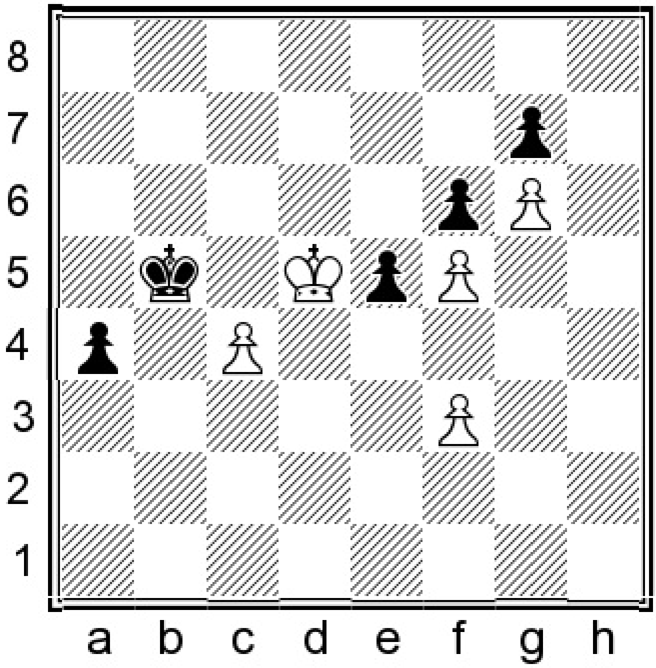
White to move

White could easily have set up a good defence here. All he needed to do was advance the c-pawn.

53.♔d6?

Ricardo thought that it was easier just to repeat moves with the kings, but there is a snag. It was essential to play 53.c4! a4 54.♔d6 and now Black must indeed repeat moves with 54...♔b7 55.♔d7 ♔b6 56.♔d6.

53.♔d6? ♔b5 54.♔d5 a4! 55.c4+



Now the black king steps aside from the expected repetition:

55...♔a6!

Avoiding 55...♔b6? 56.♔d6 ♔b7 57.♔d7 ♔b6 58.♔d6=.

56.♔e6

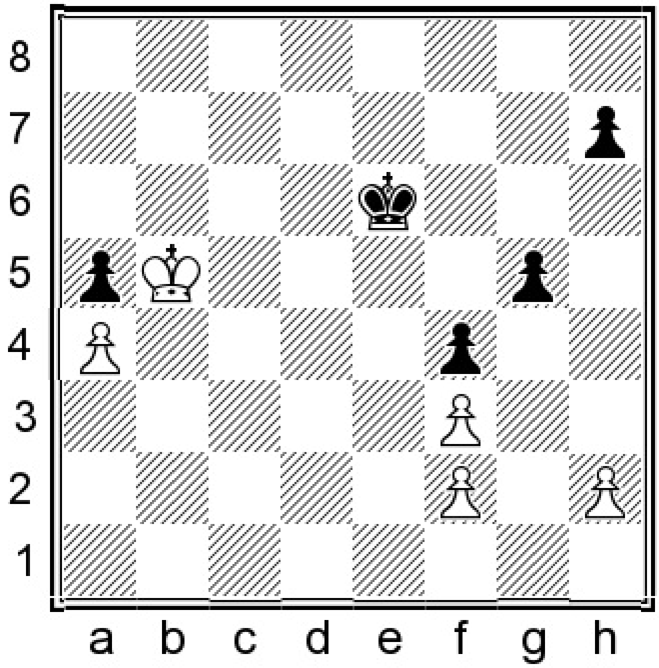
This is a case in which the queen will be able to defeat the very advanced pawns, although this is not always easy.

56...a3 57.♔f7 a2 58.♔xg7 a1=♕ 59.♔f7 ♕d4 60.g7 ♕xc4+ 61.♔f8 ♕c8+ 62.♔f7 ♕d7+ 0-1

5. Trapping the king in the corner

A king which captures a blocked rook's pawn has to be careful not to get stuck in front of its own pawn.

Ivan Sokolov 2615
Johan Hellsten 2485
Malmö 1997 (3)



Black to move

The black position might appear desperate, but in this case, Black's decision to simplify was taken on the basis of precise calculation. Black's king can incarcerate the white monarch following the capture of the a5-pawn:

44...♔d5! 45.♔xa5 ♔c5

At this point along the a-file (king on the fifth rank, pawn on the fourth rank) the white king is stuck, but not completely incarcerated, since it will be able to emerge if the black king loses the opposition, which will be possible after the white king advances to a5 or a6. But Black has three reserve tempi, just enough.

46.h3 h6!

It is essential to hoard the following tempo. The careless 46...h5? would lose after 47.♔a6 ♔c6 48.a5 h4 49.♔a7 ♔c7 50.a6 and the king emerges.

47.♔a6 ♔c6 48.a5 h5

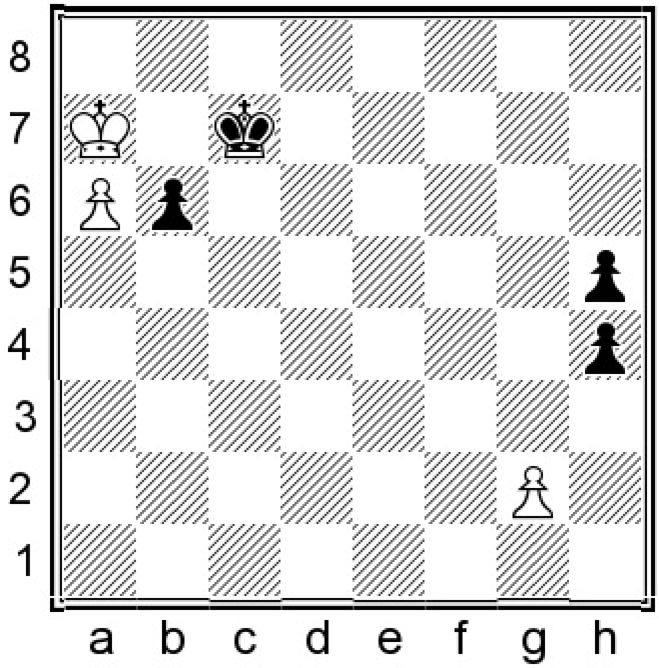
Another little tempo move.

49.♔a7 ♔c7 50.a6 h4

And the final one. The white king is unable to escape.

51.♔a8 ♔c8 52.♔a7 ½-½

Alexander Wagner
Rudolf Duhssen
cr 1927



White to move

1.g4

This resource is ingenious, but it should not have worked.

1...hxg4?

This seems a gross blunder for a correspondence game, although in those days there were no engines to help you.

The victory by means of 1...h3! is very subtle: 2.g5! h2 3.g6 h1=♗!! (3...h1=♕? 4.g7! ♕g2 5.g8=♕ ♕xg8 and stalemate anyway) 4.g7 ♗d5 5.g8=♕ ♗xg8 6.♔a8 ♗c4 and Black wins.

But the win after 1...hxg3 is trivial, for example 2.♔a8 g2 3.a7 ♔d7!, followed by the both sides queening, the exchange of queens and victory for Black in the new pawn ending.

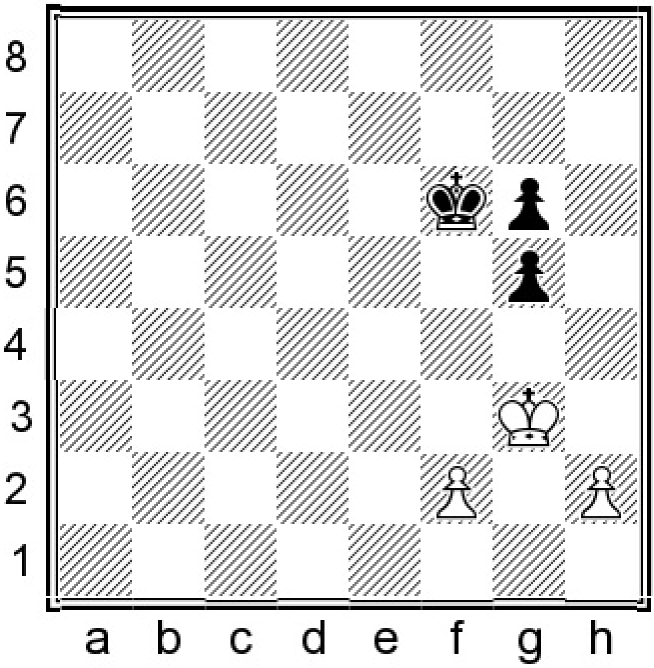
2.♔a8 h3 3.a7

Draw.

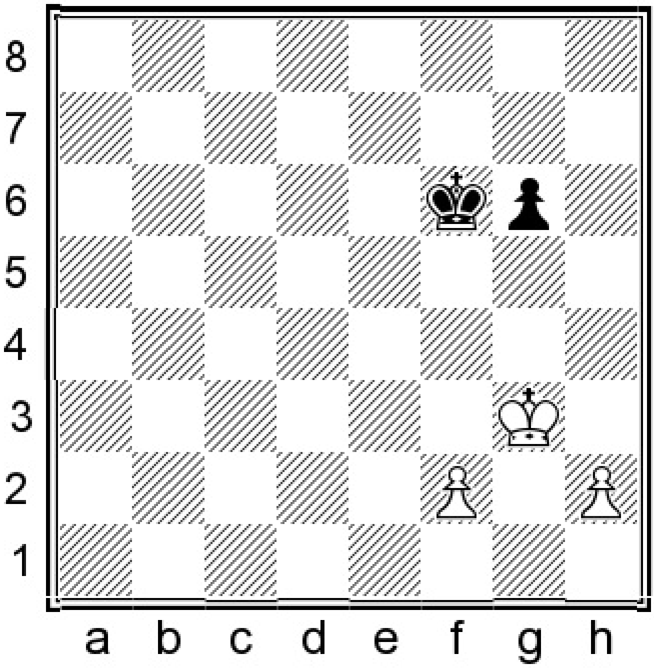
Pattern 15 Doubled pawns

Doubled pawns present a number of disadvantages in pawn endings. The most well-known is their difficulty in creating a passed pawn when they form part of a pawn majority. But we are going look at two other issues: how hard it is to defend them when they are isolated, and how inflexible they are in preventing a breakthrough.

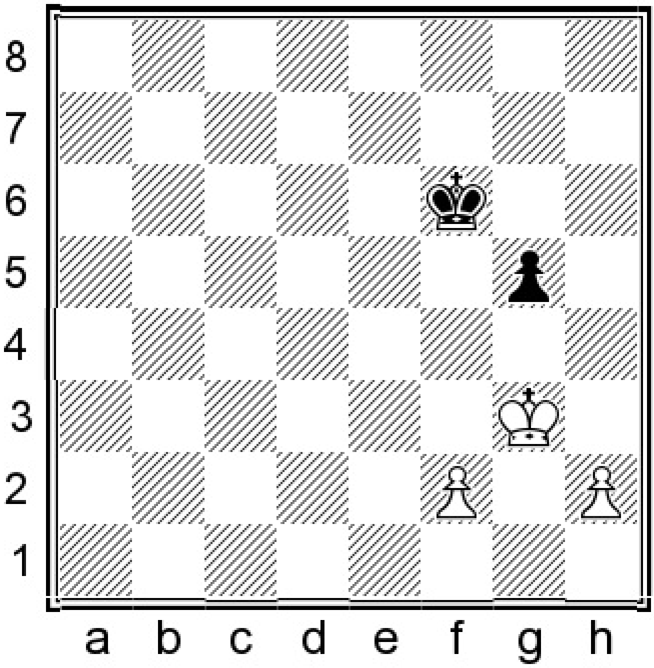
Series: Doubled pawns



Position 1



Position 2



Position 3

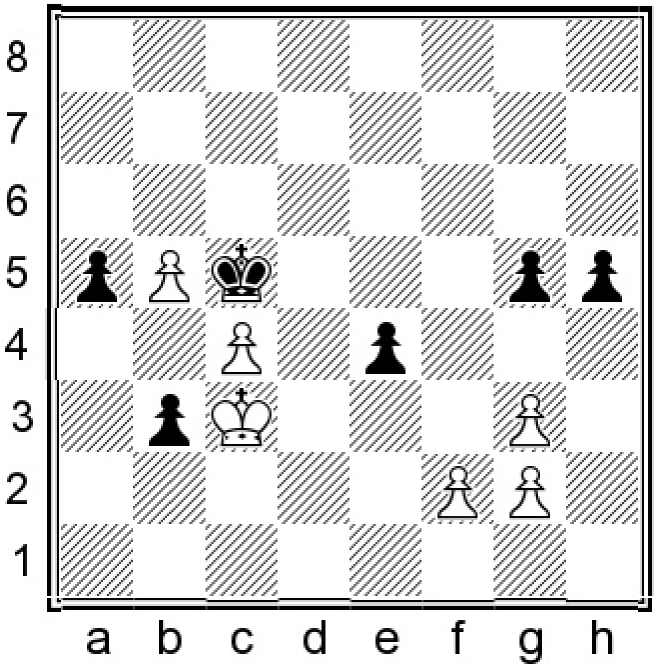
If we focus on the first position, White threatens 2.♔g4 and Black cannot avert defeat, even if it is his move. **1...♔f5 2.h3 ♔e6** After 2...g4, 3.h4 is the simplest: 3...♔e5 4.♔xg4 ♔f6 5.♔f4 ♔f7 6.♔g5 ♔g7 7.h5!+–. **3.♔g4 ♔f6 4.f3 ♔f7 5.♔xg5 ♔g7** and now the two reserve tempi allow White to win, thanks to the mechanism of outflanking.

More striking is the realisation that, in the second and third diagrams, where we have removed one of the black pawns, if it is Black's move it is a draw in both cases. This can be easily verified and is a good exercise.

The theme of the pawn breakthrough already has its own section, but we shall add this example, which is a good illustration of the shortcomings of doubled pawns.

In the position given in the right column, Black has only one winning move and it is not the normal one.

Kuznetsov
Zelenskikh
cr 1971



Black to move

1...g4!!

Black fixes the doubled pawns in order to strike with the breakthrough ...h5-h4, which will inevitably create a passed pawn. The natural and materialistic 1...a4 leads to a draw after 2.g4! hxg4 (2...h4 3.♔b2=) 3.g3, and now there is no breakthrough with which to create a passed pawn.

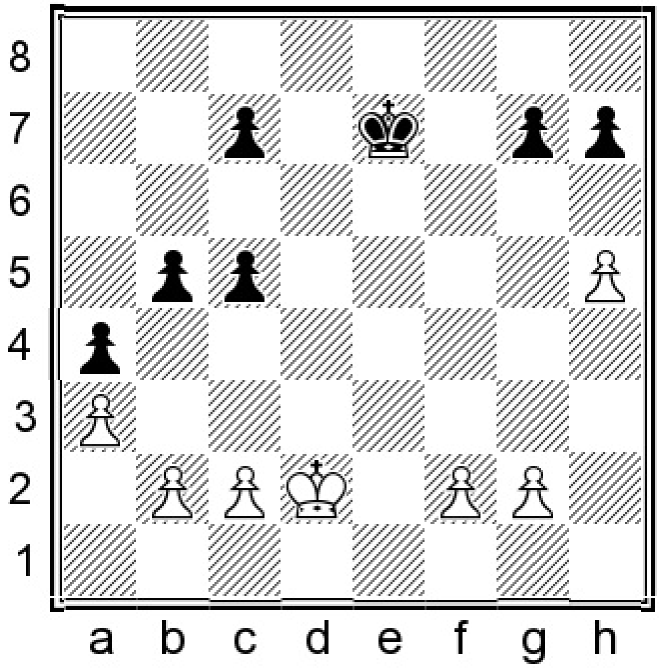
1...g4!! 2.♔xb3 h4! 3.gxh4 g3 4.fxg3 e3

And now Black's two separated passed pawns win, even though White has five.

5.♔c2 e2 6.♔d2 a4 0-1

We shall now consider the difficulties of a majority containing doubled pawns in creating a passed pawn, which is often associated with the Ruy Lopez Exchange Variation.

Liviu-Dieter Nisipeanu 2592
Marie Sebag 2403
Deizisau 2003 (5)



White to move

This is a typical ending arising from that variation. White prepares to advance his majority and create a passed pawn, while the black majority cannot achieve much on its own.

33.♔e3 ♔f6 34.f4 ♔f5 35.♔f3 h6

35...c4!?, intending the trick 36...c3, is always countered with 36.c3!.

36.g4+ ♔f6 37.♔e4 c6 38.c3!

White makes a waiting move, so that Black must either move his king or advance his c-pawns, allowing the penetration of the white king.

38...♔e6 39.g5! c4 40.f5+ ♔f7 41.gxh6 gxh6

White already has a passed pawn.

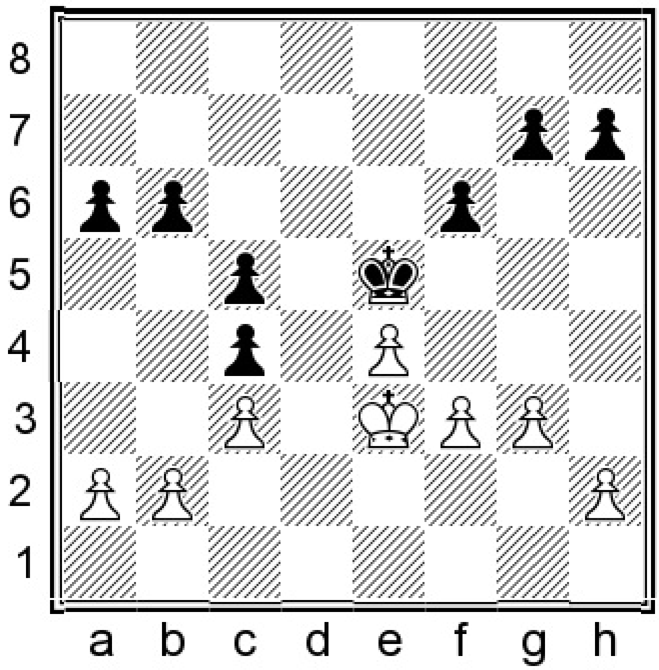
42.♔e5 c5 43.f6 ♔f8 44.♔f4 ♔g8 45.♔e4 ♔f8 46.♔e5 ♔e8 47.♔d5

White opts for the old plan of abandoning his passed pawn in order to collect the enemy queenside pawns.

47...♔f7 48.♔xc5 ♔xf6 49.♔xb5 ♔g5 50.♔xa4 1-0

A simple example, with many ranks free for White to advance his king.

Alfonso Fernandez Garcia
Burgos 1977



White to move

The question which is sometimes posed is whether the pawn ending arising from the Spanish Exchange Variation, with seven pawns per side and thus many possibilities of closing the position, is really won.So here we see an example with a full seven pawns. The difficulty is not so much to create a passed pawn as achieving this at the same time as keeping ways open to enter with the king.

31.f4+

Here we diverge from the game continuation, which is very interesting, precisely because of the errors made. There followed 31.a4?! g6! (this move, which could have been played earlier, makes it more difficult for White to play f4-f5; 31...b5 32.f4+ ♔e6 33.a5 ♔d6 34.f5! ♔e5 35.♔f3 ♔d6 36.♔f4 b4 37.g4 h6 38.h4 ♔c6 39.e5 is very easy) 32.f4+ ♔d6 33.♔f3 b5 34.a5 b4?! (Black could have withheld his two reserve tempi, although it makes little difference) 35.♔g4?! (35.g4, with the idea of f4-f5, is the right idea, and if 35...h6 (35...♔e7 36.h4 h6 37.f5! g5 38.hxg5 hxg5 ends with the typical pawn break 39.e5+–) 36.h4!+–) 35...♔e6 36.h4?? (this is not the right way to advance; 36.♔h4 ♔d6 37.g4+–) 36...h5+! 37.♔f3 ♔d6?? (Black misses his chance to close the position; 37...f5!, shutting out the white king and reminding us that it is necessary to be attentive to this theme) 38.g4 ♔e6 39.f5+! (finally this stock advance) 39...gxf5 40.gxh5 fxe4+ 41.♔xe4 and White wins, thanks to his distant passed pawns.

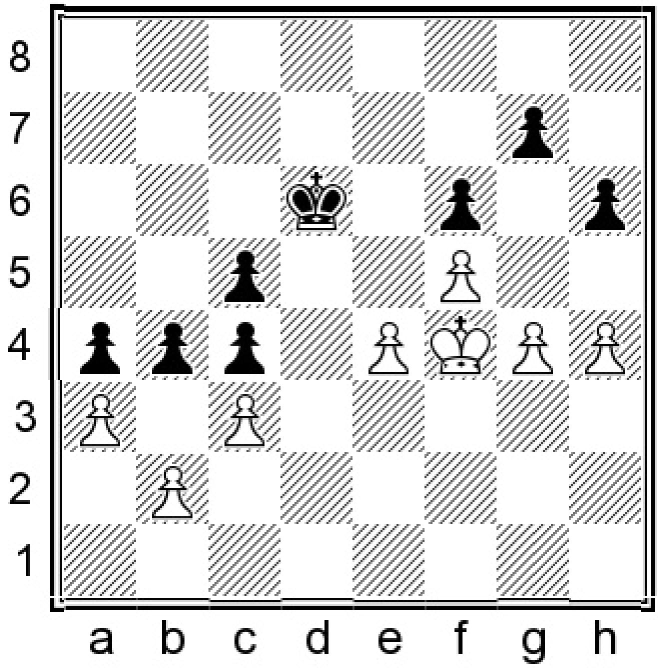
31.f4+ ♔d6 32.f5!

The placement of the pawn on f5 is a guarantee that the position will not become closed and it forms an essential part of White’s plan.

32...♔e5 33.g4 b5 34.h4 a5 35.♔f3

From now on, White can lose tempi indefinitely with the king (oscillating between the squares f3 and e3), until his opponent runs out of reserve tempi and abandons the square e5.

35...a4 36.a3 h6 37.♔e3 ♔d6 38.♔f4 b4



39.e5+!

In this structure, this pawn break normally wins.

39...fxe5+ 40.♔e4 b3

It does not matter how many tempo moves Black has available.

41.g5+–

Conclusion

This variation suggests that the pawn ending arising from the Ruy Lopez Exchange Variation, with the initial structure, is winning for White. It also suggests that in many lines the way to win involves advancing the f-pawn to f5, with the candidate pawn (the e-pawn) on e4.

Chapter 2
Knight vs pawns

With each chapter the positions are becoming more complex. In this section the king is accompanied by a piece.

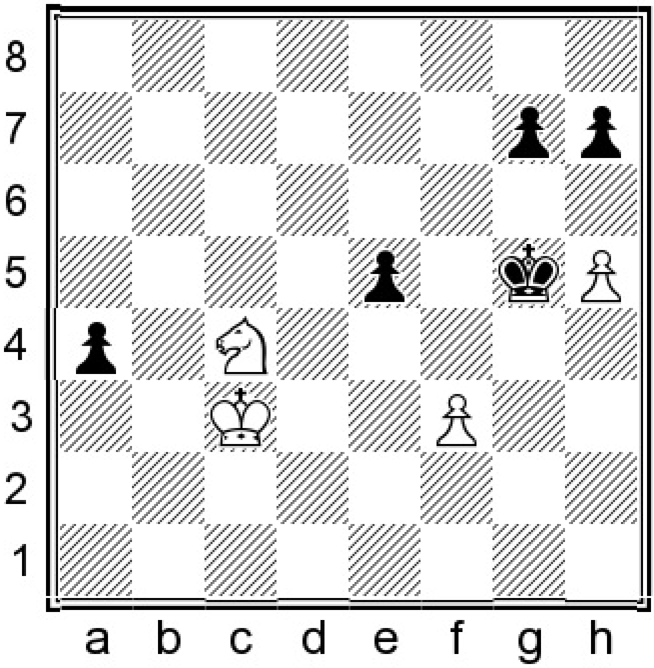
Each piece moves differently and therefore has specific qualities and defects, which are repeated in every section in which it appears.

In the fight against pawns the knight is quite clumsy, especially when dealing with distant passed pawns, and the rook's pawn in particular. However, it has some surprising abilities, as we are going to discover.

Pattern 16 Distant passed pawns

The knight is very clumsy when fighting against distant passed pawns and usually loses against a passed rook's pawn and another pawn on the opposite wing. As the knight side, you will find it hard to win unless you already have passed pawns of your own, because the knight and the king will be too busy controlling the enemy pawns. In this ending, the division of labour between king and knight is often a crucial decision.

José Carlos Ibarra 2413
Andrey Zhigalko 2478
Halkidiki 2003 (7)



White to move

White is faced with a critical decision.

45.♔b4?!

This seems logical – the motif is to eliminate the most unpleasant pawn and then return to the kingside, but the reason why this move does not work is that it loses a tempo in the struggle between the knight and the black pawns, and the plan of moving the king back to the kingside to help stop the enemy pawns proves to be too slow.

Instead, 45.♘xe5! is the correct plan, because the knight will harass the black pawns before they become really dangerous. This is a common stratagem, but we cannot regard it as a universal rule, as it requires specific calculation each time.

In this case, the next move with the knight, veering away before returning to attack the black pawns, is the really difficult one to see: 45...♔xh5 46.♘d7! ♔g5 (46...g5 encounters similar obstacles: 47.♘f6+ ♔g6 48.♘e4 ♔f5 49.♘f2 h5 50.♘h3, conclusively halting the progress of the pawns) 47.♘f8 h6 48.♘e6+ and the black king must turn back, while the knight takes on the task of exchanging itself for the last black pawn, if necessary, e.g. 48...♔f6 49.♘f4 ♔f5 50.♘h3 and as we shall see in this section the knight and the f3-pawn together create a barrier able to stop the pawns.

45.♔b4?! ♔xh5 46.♔xa4

46.♘xe5 ♔g5 and now the knight cannot prevent the very rapid advance of the rook's pawn, much as in the game. As we shall see over and over again, a rook's pawn is very problematic for a knight.

46...♔g5! 47.♔b4

The white king tries to return quickly, but he is a tempo short. The black king has time to capture the f-pawn and prevent the white monarch from approaching.

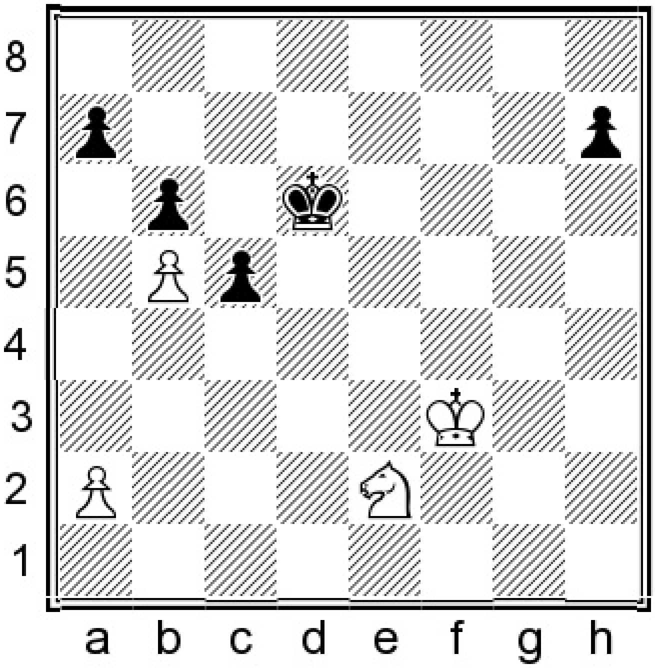
47...h5 48.♔c3 h4 49.♘xe5 h3 50.♘g4 ♔f4 51.♔d3 ♔xf3 52.♘h2+ ♔g2 53.♘g4 ♔g3 54.♘e3 ♔f3!

The black king moves to deliver a bodycheck.

55.♘f1 g5 0-1

The second pawn advances and the white king is unable to move any closer. The continuation might be 55...g5 56.♘h2+ ♔g2 57.♘g4 h2–+.

Andrei Kharlov 2630
Alexander Galkin 2565
Batumi Ech 2002 (7)

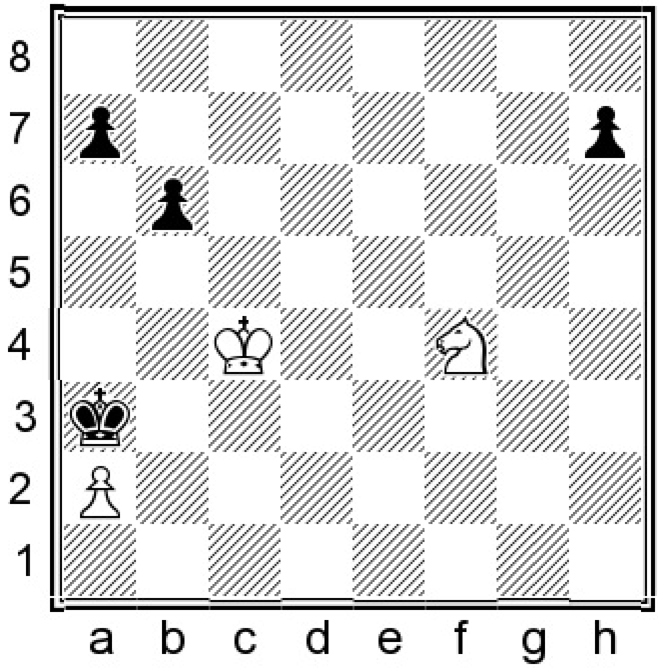


Black to move

We have a similar scenario to the previous one; one of Black’s two passed pawns is very distant, and White has a weak pawn.

39...♔d5!

The black king takes up a dominant position in the centre, preventing his opponent from doing the same. The very natural 39...c4?, with the idea of ...♔c5, fails to win, because it allows 40.♔e4 ♔c5 and after 41.♘f4 ♔xb5 42.♔d4 the central control exerted by the white pieces prevents Black from winning, despite the capture of a third pawn, for example: 42...♔a4 (42...h6 places White almost in zugzwang, but after 43.♔c3 ♔c5 44.a4 a6 45.a5 b5 (45...bxa5 46.♘e6+ ♔d5 47.♘f4+=) 46.♘e6+ ♔d6 47.♘g7 ♔e5 48.♔b4 ♔f6 49.♘e8+ ♔e5 50.♘c7 h5 51.♘xa6 the two pawns queen at the same time) 43.♔xc4 and now the Lomonosov tablebases confirm that it is a draw, although the variations are very difficult for a real game. Let us examine them: 43...♔a3



analysis diagram

and now the drawing move is very unexpected: 44.♘d5! (it is logical that 44.♔b5 ♔xa2 45.♔a6 loses after 45...♔b3 46.♔xa7 b5 and once again the knight cannot cope with two distant passed pawns) 44...♔xa2 45.♘e7 h5 46.♔d3! (the king tackles the h-pawn and the knight displays its tactical virtues to capture one of the queenside pawns and stop the other) 46...b5 47.♘c6 and one of the black pawns falls: 47...a6 48.♘b4+, with a draw.

39...♔d5! 40.♔e3 ♔c4 41.♔d2

Or 41.a4 ♔b3 42.♔d3 ♔xa4 (42...h5!?) 43.♔c4 h5 44.♘f4 h4 45.♘h3 ♔a5! 46.♘f2 a6 and, with three passed pawns spread over both wings, Black wins.

41...♔xb5

With three extra pawns, including a distant passed pawn, the rest is easy.

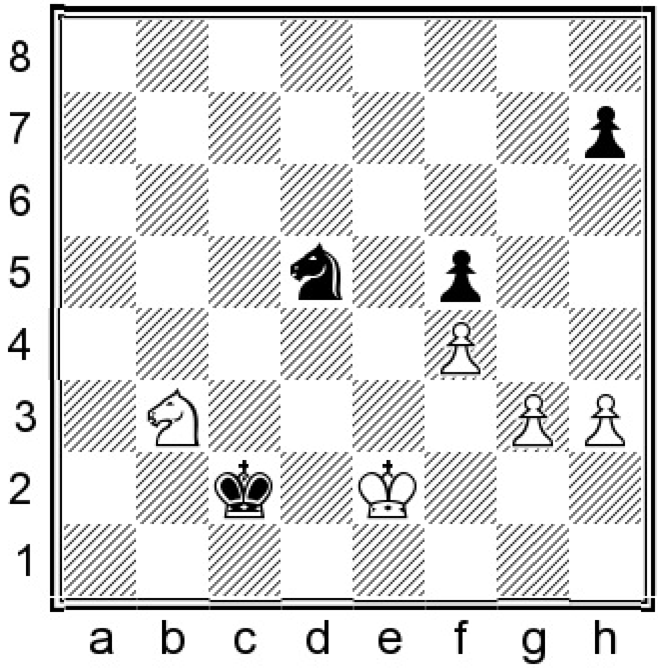
42.♔c3 ♔a4 43.♔b2 h5 44.a3 h4 45.♘f4 c4 46.♔a2 b5 47.♔b2 c3+ 48.♔a2 c2 49.♔b2 c1=♕+ 50.♔xc1 ♔xa3 51.♔b1 a5 52.♘h3 ♔b3 0-1

Pattern 17 The barrier

The knight’s ability to create *barriers* in the king’s path is one of the abilities which allow it to make up for its slow movement. This quality is seen above all in endings against a bishop, or when facing just pawns.

Giedre Vanagaite 1958

Yudania Hernandez Estevez 2284
Porto Carras 2011 (9)



Black to move

White has just captured a very dangerous pawn on b3 and is about to lose the knight, but it seems that he will be able to trade off all the black pawns and make a draw.

48...♘c3+!

An important zwischenzug which makes White's task of exchanging the pawns more difficult. Instead, 48...♔xb3 49.♔d3 ♘c3 50.g4! forces the exchange of both black pawns.

48...♘c3+! 49.♔e3

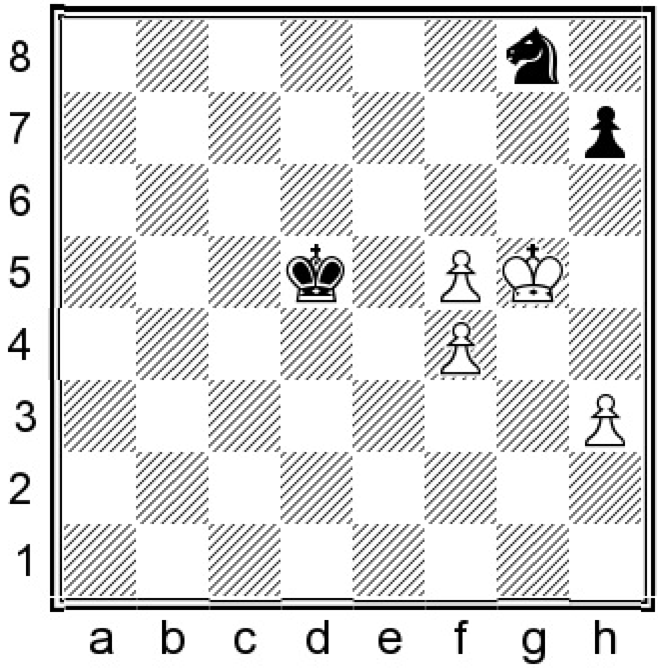
The difference is that the king now has to go to e3.

49...♔xb3 50.g4!

50.♔d4 ♘e2+ 51.♔e5 ♘xg3 and the f5-pawn remains solidly defended from the *remote square* (see **Pattern 18**). But with the move in the game it seems that exchanges are inevitable. Now Black replies with an extraordinary manoeuvre involving her king and knight:

50...♔c4! 51.gxf5 ♔d5 52.♔f3 ♘e4 53.♔g4 ♘f6+ 54.♔g5 ♘g8!

Black's manoeuvre terminates with this move. The knight, together with the pawn on h7, have created a barrier preventing the entry of the white king and the h-pawn is safe. From now on the support of the king allows the white pawns to be easily captured.

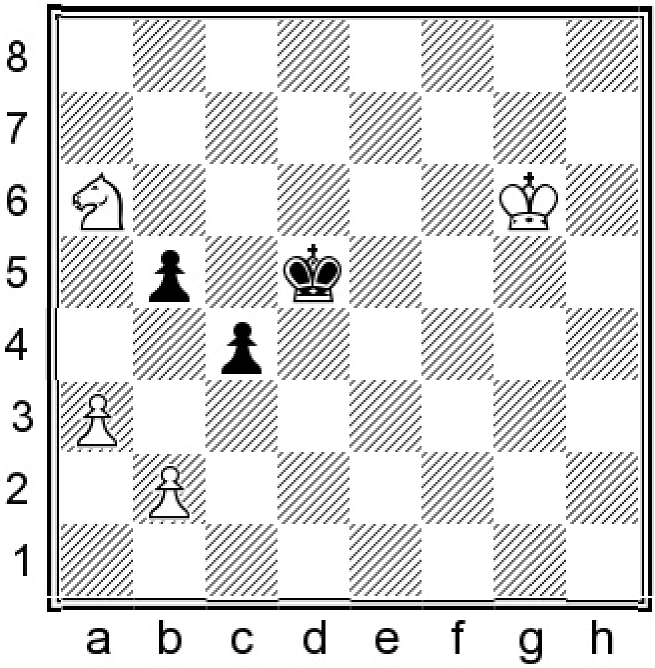


55.h4 ♔d6 56.♔h5 ♔e7 57.♔g5 ♔f7 58.♔g4 ♔f6 59.♔h5 h6 60.♔g4 ♘e7 61.♔h5 ♘xf5 62.♔g4 ♔g6 63.h5+ ♔f6 64.♔f3 ♘g7 65.♔g4 ♘e6 66.f5 ♘g7 0-1

Pattern 18 Defence from a remote square

In some cases, the side which is a knight down aspires only to exchange all the pawns and benefits from the remoteness of the enemy king to do so. Without the support of its king, the knight is clumsy in defending the pawns, but occasionally it manages to do so by placing itself on a square out of the reach of the enemy. We shall call this situation *defence from a remote square*.

David Bronstein 2570
Alexander Chistiakov
Moscow 1978



Black to move

58...c3!?

The only interesting variation, and in fact it creates serious problems for White. 58...♔d4?! is obviously too slow: 59.♘c7! ♔d3 60.♘xb5 ♔c2 61.a4 and the white pawn escapes.

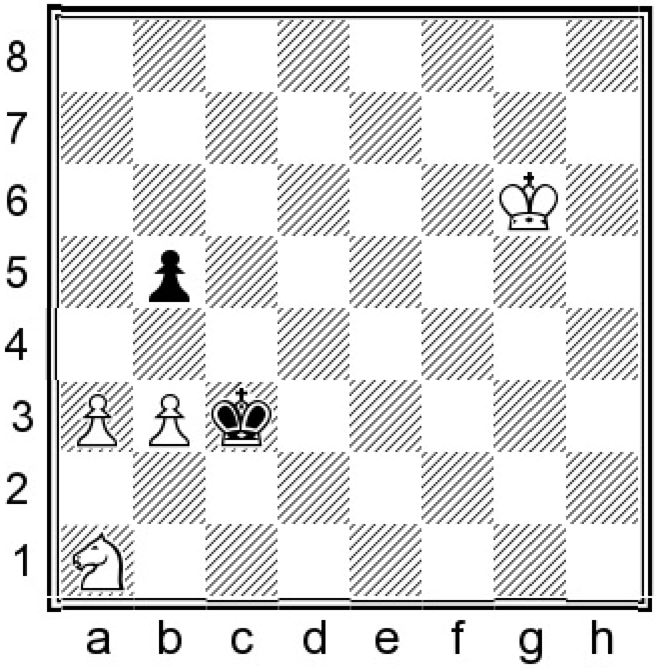
58...c3!? 59.b3!

Not 59.bxc3? ♔c4 and both white pawns will be eliminated, e.g. 60.♘c7 ♔xc3 61.♘xb5+ ♔b3 62.♔f5 ♔a4=.

59...♔d4 60.♘b4 c2

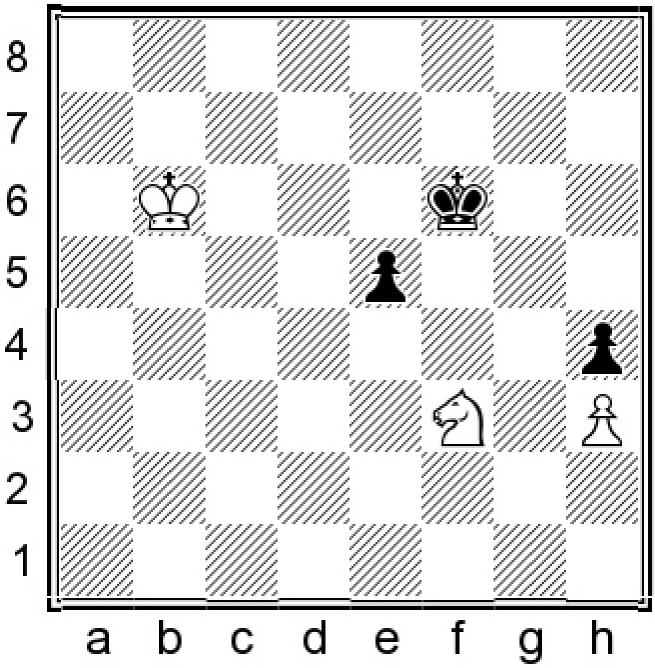
A logical sacrifice of the pawn to enable the king to reach c3. A detour with 60...♔e3 is very slow: 61.♔f5 ♔d2 62.♔e4 c2 63.♘xc2 ♔xc2 64.a4 b4 65.a5 ♔xb3 66.a6 ♔c2 67.a7 b3 68.a8=♕ b2 and the black pawn has only reached the seventh rank.

61.♘xc2+ ♔c3 62.♘a1! 1-0



A curious solution. The king cannot eliminate the knight because then the white passed pawn escapes.

Vitaliy Bernadskiy 2593
Petr Golubka 2479
Lutsk ch-UKR 2019 (5)



Black to move

Black's task seems simple: to eliminate White's h-pawn in exchange for his two pawns. The black king is nearer and the knight can be harassed by the king or the e-pawn. But Black underestimates the power of the *remote square*:

77...e4?

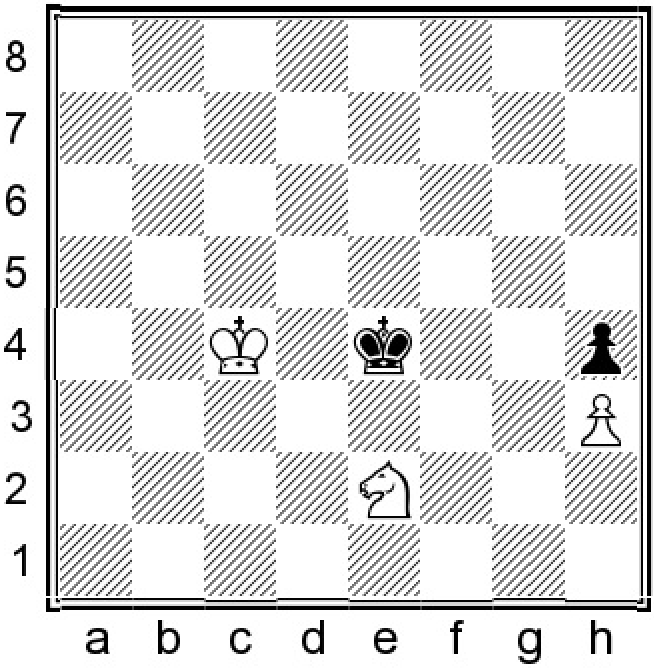
After this natural move Black loses. It is really surprising that it is better to leave the pawn further back, so that the white king captures it at a greater distance from f3, the key square for the subsequent *bodycheck*.

77...♔f5! 78.♔c5 ♔f4 79.♘g1 ♔g3 80.♔d5 ♔g2 81.♔xe5, and now the white king is not in time to capture the h-pawn in the right circumstances: 81...♔xg1 82.♔f4 ♔f2 83.♔g4 ♔e3 84.♔xh4 ♔f4, and the black king has managed to imprison the white king on the rook's file.

77...e4? 78.♘g1 ♔e5 79.♔c5 e3

Maintaining the bodycheck. Instead, 79...♔f4 was clearly less effective: 80.♔d4 ♔g3 81.♔xe4 ♔g2 82.♔f4 ♔xg1 83.♔g4 and the white king has arrived in time.

80.♔c4 e2 81.♘xe2 ♔e4



We have reached an ending which has occurred several times and is of some theoretical interest. The side with the knight has not always been able to find the winning manoeuvre, despite the fact that it was analysed years ago in a study by Kubbel. The solution is to defend the pawn from the remote square (g1) and then accurately calculate the approach of the king:

82.♘g1! ♔e3 83.♔d5 ♔f2 84.♔e4! ♔xg1 85.♔f3!

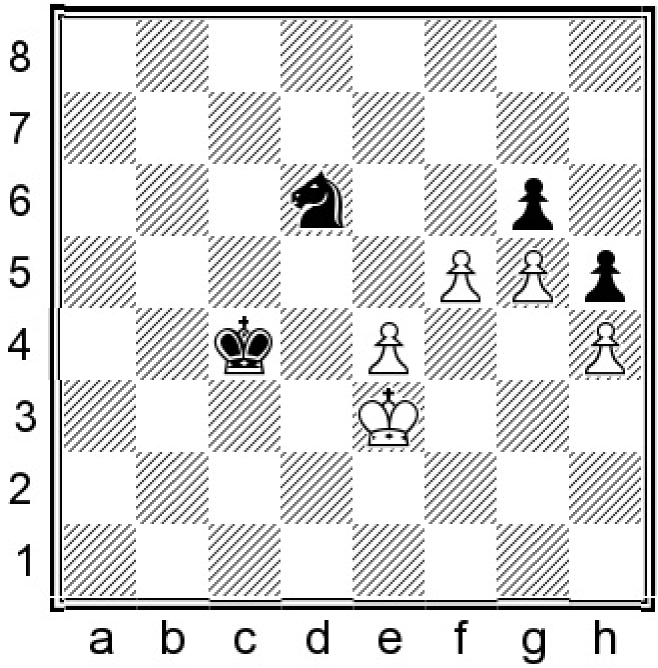
The final bodycheck.

1-0

Pattern 19 Blockade

It is not strange for us to come across this topic here, given the knight's great prestige as a blockader. In contrast to its difficulties against distant pawns, the knight is very effective for stopping connected or nearby passed pawns. If it joins forces with the king, the ideal blockader, it can accomplish great exploits.

Wesley So 2776
Maxime Vachier-Lagrave 2744
Baku 2015 (4)



Black to move

In this apparently delicate position, the knight not only stops the pawns but also prevents the exchange of the last black pawn and forces victory:

60...♘e8!!

The knight takes up a very flexible position, awaiting the opponent's decision about the way to advance his f-pawn. From e8 the knight is ready to *blockade* the white passed pawns in all cases.

61.f6

If 61.fxg6 ♘g7, with another example of *blockade*, combined with a *barrier*: 62.♔f4 ♔d4–+.

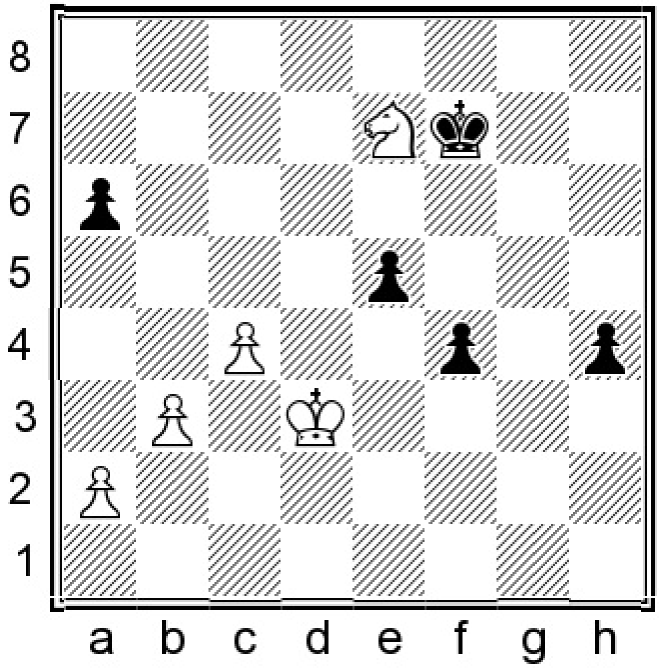
61.♔f4 ♔d4–+ transposes to one of the other variations.

61...♘c7 62.♔f4 ♔d4 63.e5 ♘e6+

With a perfect blockade; the white pawns start to fall.

The blockade can be total, followed by the destruction of the pawns or by a balanced situation, or it can include variations in which the knight has to be exchanged for one of the passed pawns. This second situation is winning if the side with the knight has his own passed pawns.

Pedro Diez de Rivera 2537
Richard Hall 2582
cr 2006



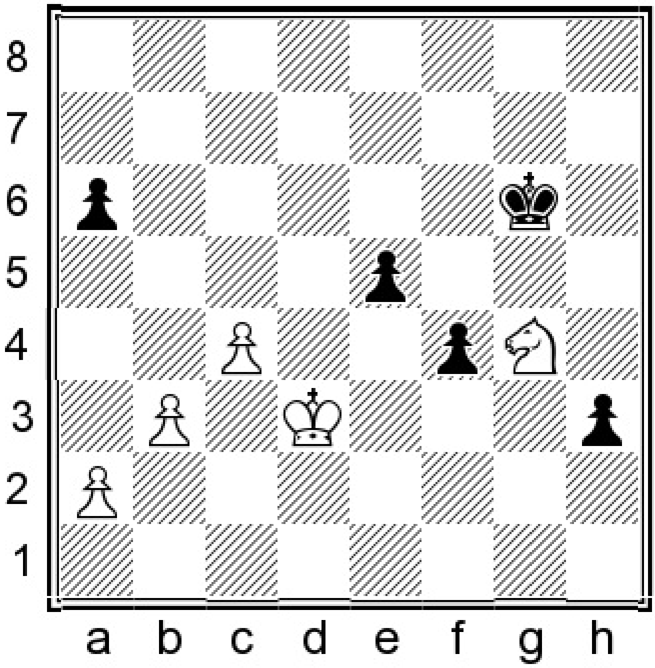
White to move

In this example, the knight shows its flexibility in coping with and in some variations completely blockading several pawns which are close together.

47.♘f5! h3 48.♘h6+

The classic accelerator check, a tactical mechanism which allows the knight to arrive quickly to catch a fleeing pawn.

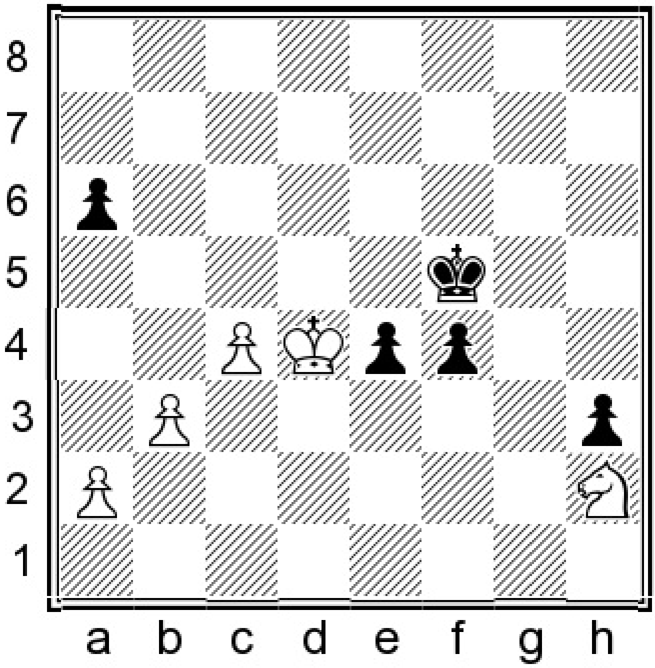
48...♔g6 49.♘g4



49...♔f5

49...♔g5 50.♘xe5 ♔h4 51.♘f3+ (another accelerator check) 51...♔g3 52.♔e4, with a blockade of both pawns and victory, thanks to the queenside passed pawns.

50.♘h2 e4+ 51.♔d4



A neat situation, in which the coordination between the knight and the king allows the *total blockade* of three pawns, in two different variations.

51...e3

The other variation is 51...f3 52.♔e3, equally decisive.

52.♔d3

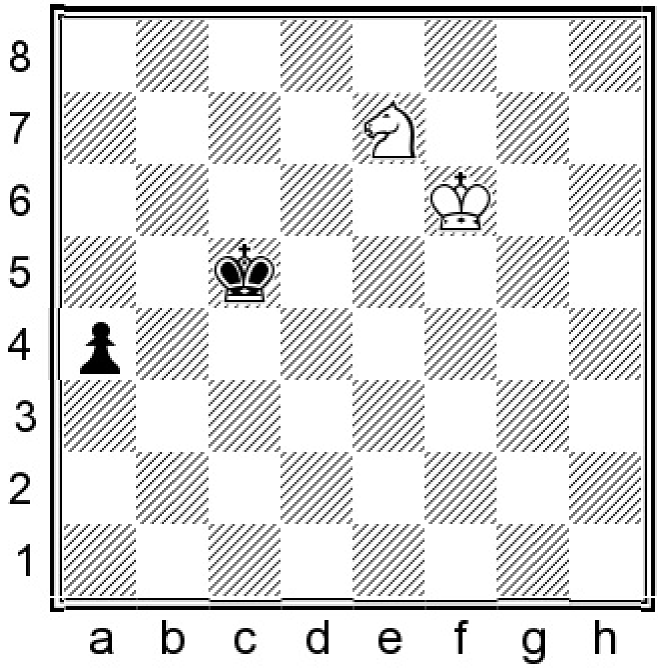
The three pawns are all restrained, thanks to the blockade by the knight and the collaboration of the king. It only remains for White to advance his own passed pawns.

52...a5 53.a3 ♔e5 54.♘f3+ ♔d6 55.b4 axb4 56.axb4 ♔c6 57.♔e2 ♔d6 58.♔f1 ♔c6 59.b5+ ♔c5 60.♔g1 ♔b6 61.♔h2 1-0

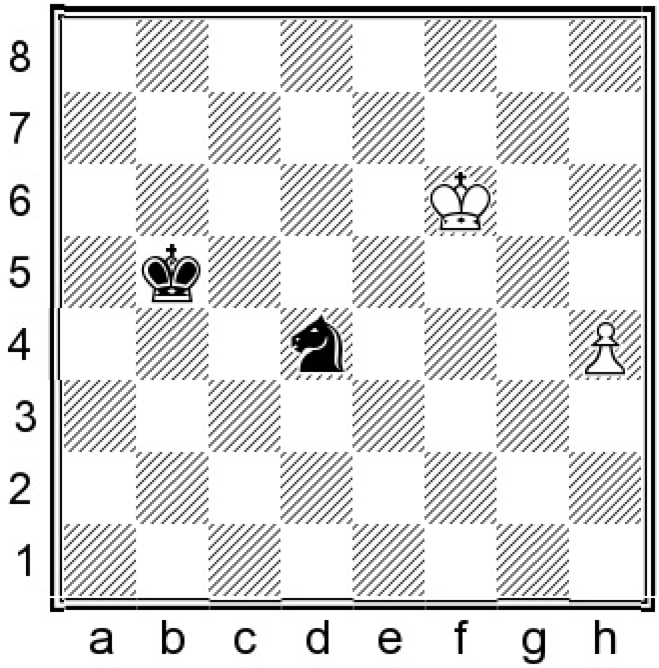
Pattern 20 The knight’s problems with a single pawn

The knight can have problems stopping a single passed pawn, especially if it is a rook’s pawn, and to a lesser extent a knight pawn. Intuition helps, but it is advisable to rely on concrete calculation, because sometimes the knight is close to the pawn but does not find the correct circuit, and at other times it is further away yet thanks to checks and forks, it is successful.

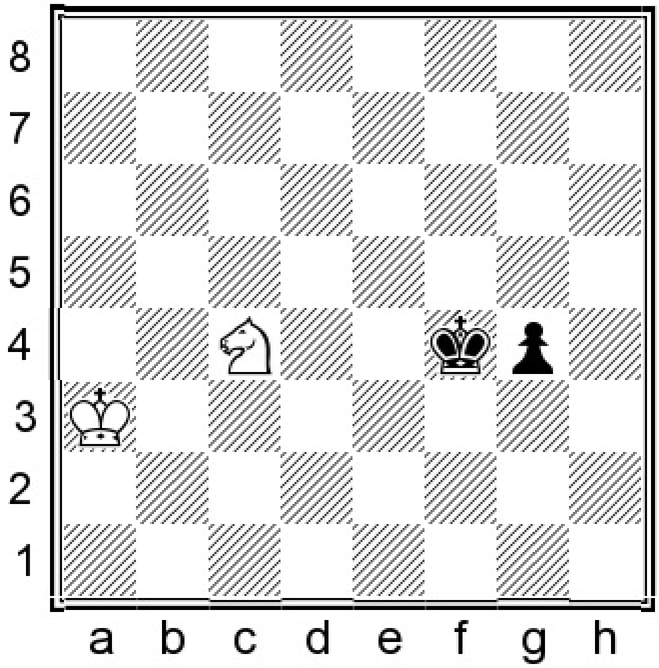
Series: Knight vs a distant passed pawn



Position 1



Position 2



Position 3

The three positions that we present here have all occurred in practice. Despite it being the knight side's move and despite being faced with pawns which need three or four moves to queen, the knight is unable to stop any of the pawns.

In the first two positions (with a rook's pawn) the knight is two diagonal squares away from the enemy king, which is usually called the *magic distance*, because it takes four moves to go from one of these squares to the other, in spite of their proximity.

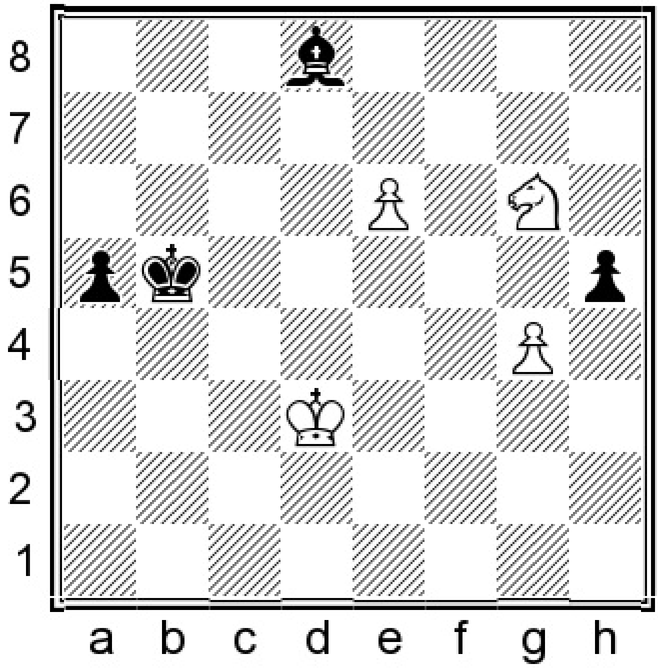
In the third position, the knight again has an unfortunate position in relation to the enemy king because it cannot approach without placing itself at the *magic distance*.

In all three cases, the position of the enemy king, restricting the knight, plays a decisive role in the knight's failure.

If we move the positions to the right or the left, we get additional interesting information. In Diagram 1, if we move the position to the right, it becomes a draw. In Diagram 2, if we move the position to the left, it also becomes a draw. In both cases the pawn can be stopped when it gets closer to the centre of the board.

The positions have occurred in at least the following games: Position 1 in Gantsevich-Fedoseev, 2007, and Van der Sterren-Scheeren, 1977, Position 2 in Eingorn-Beliavsky, 1986, and Position 3 in Sammalvuo-Maki Uuro, 1999.

Anatoly Donchenko 2370
Leonid Totsky 2440
Smolensk 1991

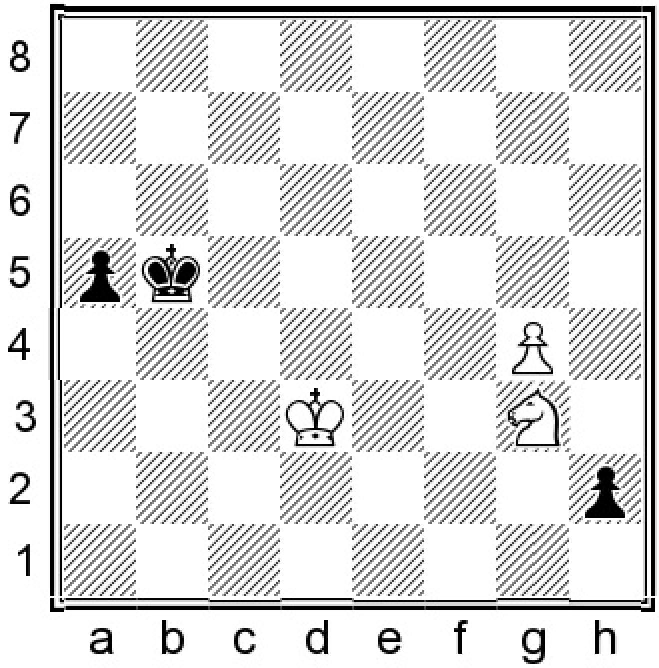


Black to move

In this game, which is a mixture of subtle moves and blunders, we can see the problems experienced by the knight in combating distant passed pawns and finally against a single pawn.

52...hxg4?

The bishop is about to be lost and Black decided not to leave a single white pawn alive, but it was better to follow the golden rule which says that 'the knight has many problems with passed rook's pawns' and create a second one of these: 52...h4! 53.e7 ♗xe7 54.♘xe7 h3! 55.♘f5 h2 56.♘g3.



analysis diagram

And here we reach an excellent example of the *division of labour*, which works in Black's favour: while the white king has to deal with the a-pawn, the black king can transfer to the kingside, capture the g-pawn (which the knight cannot defend) and then, taking advantage of the h-pawn being on the seventh rank, he can exploit the knight's difficulties in stopping rook's pawns: 56...♔c5! 57.♔c3 ♔d5 58.♔b3 ♔e6! (brilliant calculation; not 58...♔e5? 59.g5 and the king is confronted with a barrier and fails to win by one tempo: 59...♔e6 60.♔a4 ♔f7 61.♔xa5 ♔g6 62.♔b4 ♔xg5 63.♔c4 ♔f4 64.♘h1 ♔f3 65.♔d3 ♔g2 66.♔e2=) 59.♔a4 ♔f6 60.♔xa5 ♔g5 61.♔b4 ♔xg4 62.♘h1 ♔f3 63.♔c3 ♔g2 and in this case the black king arrives in time to capture the knight and then escape from the corner.

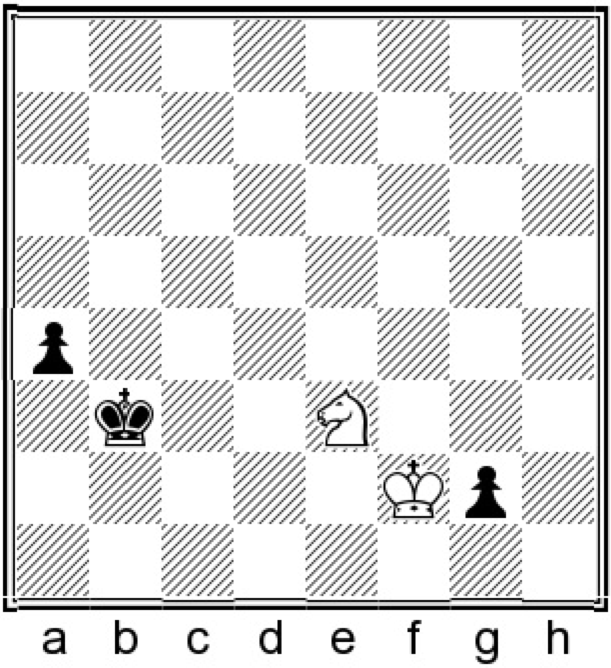
52...hxg4? 53.e7 ♗xe7 54.♘xe7 g3 55.♔e3?

Natural, but now it was necessary to bring the knight closer; after the text move this will no longer be possible: 55.♘f5! g2 56.♘d4+ ♔b4 57.♘e2 ♔b3 58.♔e3 a4 59.♔f2 ♔c2 60.♘d4+ and the knight reaches a correct circuit for stopping the pawn.

55...g2 56.♔f2 ♔c4!

Once again, brilliant exploitation of the deficiencies of the knight, which is unable to stop the a-pawn, despite it being White to move and the pawn requiring a further four moves for promotion. After 56...♔c5 the magic distance is not effective since 57.♘g6 a4 58.♘f4 a3 59.♘d3+ draws.

57.♘f5 a4 58.♘e3+ ♔b3!

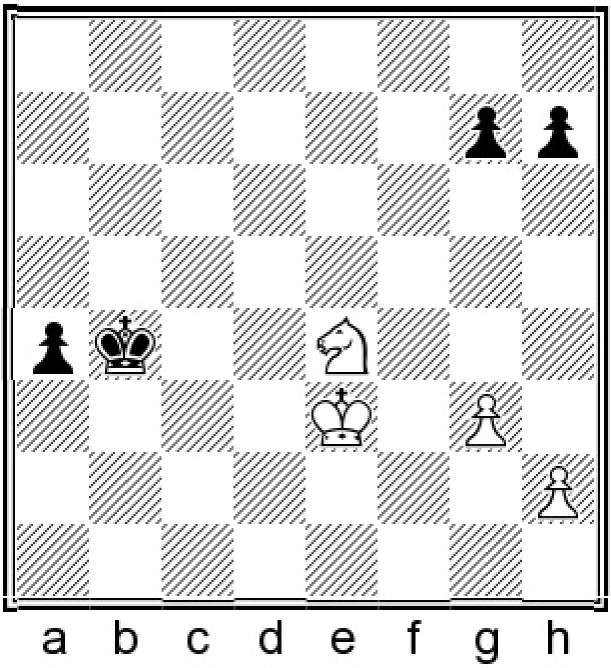


Again preventing the knight from approaching, by placing the king at a less prestigious distance than the *magic* one, but no less effective.

59.♘xg2 a3 60.♘f4 a2 0-1

In contrast, everything changes when the piece confronting the distant passed pawn is the king.

Evgeny Bareev 2700
Zoltan Ribli 2565
Neum 2000 (3)



White to move

47.♔d3

The king takes on the task of stopping the pawn, while the knight goes after the black pawns. The alternatives are simple.

47...a3 48.♔c2 ♔c4 49.♘g5 h6 50.♘e6 g5 51.g4 ♔d5 52.♘d8 ♔e4 53.♘f7 1-0

Chapter 3

Bishop vs pawns

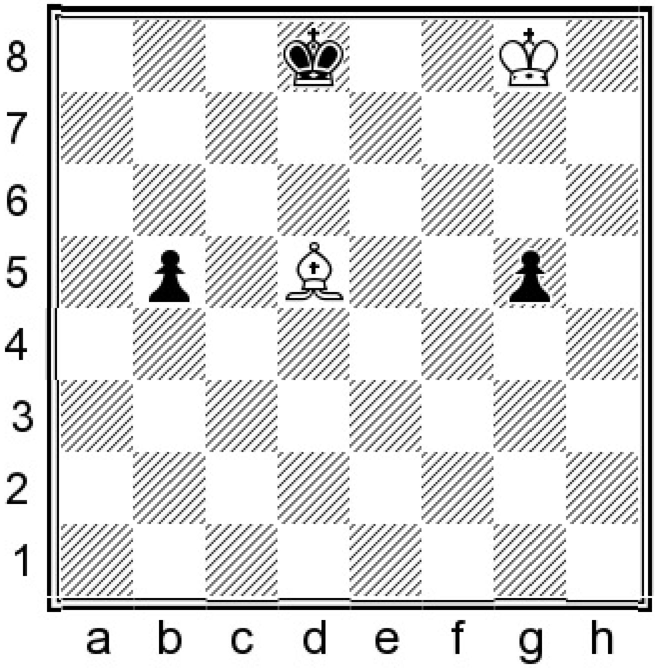
The bishop is much more effective than the knight in the fight against one or more pawns. This is mainly because it can deal with two very distant pawns, although it is more common for it to deal with one pawn and carry out another task on the opposite wing. These two circumstances combined make its results much better.

But fighting against nearby pawns (see **Pattern 23**), its results are also good, even a little better than those of the knight. This leads us to believe that the bishop is always better than the knight on an open board, and that it is worse only when it begins to bump into its own pawns.

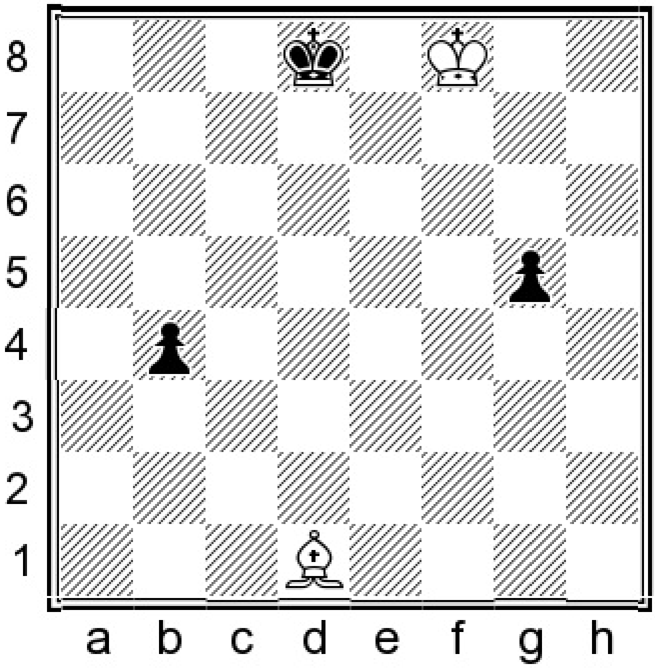
Pattern 21 Bishop vs distant pawns

As we have pointed out, the bishop can stop distant pawns, but in order to capture them it always needs the help of the king. There are three things to fight for in bishop vs separated passed pawns positions: the most decisive is situating the king in front of one of the pawns (or group of pawns), another useful one is stopping the pawns with the bishop on the same diagonal, and a third one (for the side with the pawns) is to displace the bishop from its ideal square, from which it stops the pawns on both sides.

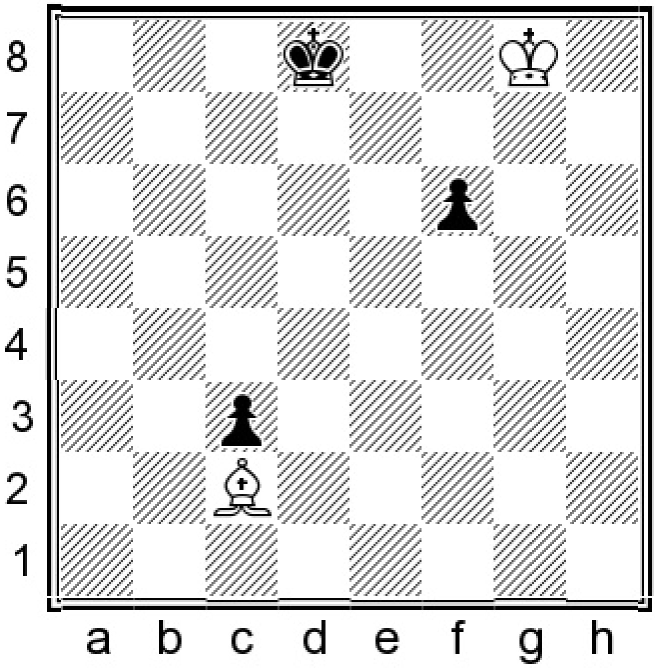
Series: Pants



Position 1



Position 2

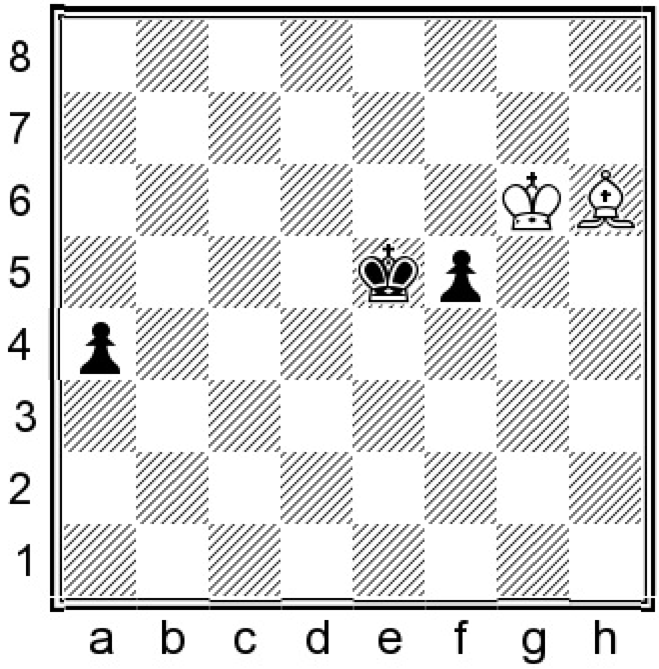


Position 3

In our first series we look at a schematic situation: the bishop confronts two pawns alone. In the first diagram we have the situation which Dvoretsky calls ‘pants’, which can be reached when the bishop does not stop the pawns on the same diagonal and the king is too far away: one pawn advances, the bishop controls it, but then the other advances. And when one of the pawns has only one square of the same colour as the bishop left to cross, the other pawn is sacrificed to open a way through. In short, the bishop cannot cope with both pawns, for example 1...g4 2.♔g7 g3 3.♔f6 b4 4.♔e5 b3 5.♗xb3 g2 and one of the pawns queens. However. if White starts, then his king arrives in time, as can be easily verified.

In the second position, the bishop can stop both pawns, because they both have two squares of the same colour as the bishop left to cross, so if one of them sacrifices itself the bishop can always capture it and still be in time to stop the other one. In the third position the pawns are stopped on the same diagonal. In both cases everything depends on how close the kings are. In practice, *pants* situations are more frequent in positions with more pawns, where one (or both) of the kings is busy with other tasks. Far more frequent is the battle to place the king in front of one of the pawns.

Luboslav Katov
David Recuero Guerra
Herceg Novi 2008



White to move

This position is an extreme example of the struggle of two pawns against a bishop. The white king is quite close to one of them but is never able to get in front of the pawn and White ends up losing.

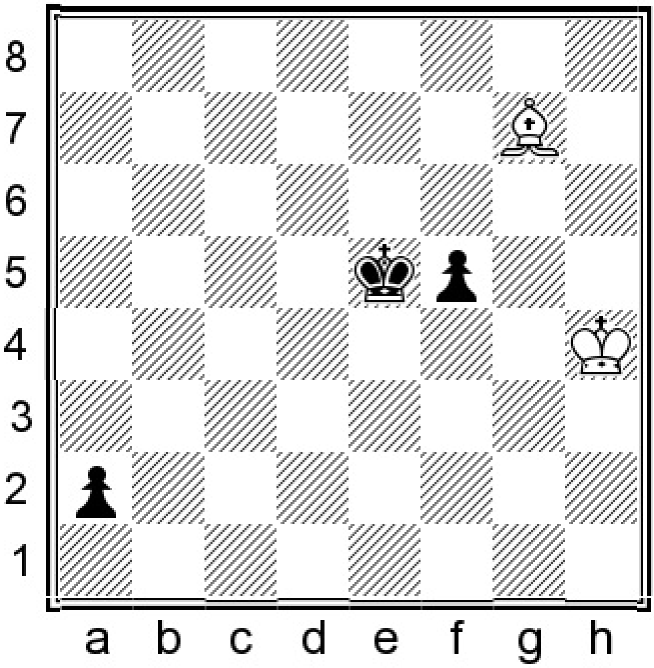
55.♔h5

Trying to place the king in front of the f-pawn. Now 55.♗f8 becomes an example of *pants*: 55...f4 56.♔g5 f3! 57.♗c5 a3 and one or other of the pawns queens; similarly after

55.♗c1 Black wins with 55...f4 56.♔g5 f3–+.

55.♔h5 ♔e4?

This seems logical and yet it lets slip the victory, as White now has a defensive manoeuvre which is well worth careful study. 55...a3! forces the bishop to occupy a less effective diagonal and now the f-pawn will be able to advance: 56.♔h4 (56.♗c1 a2 57.♗b2+ ♔e4 58.♔h4 f4 59.♔h3 f3 60.♔h2 ♔e3, followed by ...♔e2 and ...f3-f2) 56...a2 57.♗g7+ (57.♔g3 ♔f6 and the a-pawn queens)



analysis diagram

57...♔f4!! A tremendous *bodycheck*, preventing the white king from deploying in front of the f-pawn (not 57...♔e4 58.♔g3 ♔e3 59.♔g2! and the white king is able to place itself in the path of the pawn) 58.♔h3 ♔f3. Once this square is occupied, it is impossible for the white king to place itself in front of the pawn: 59.♔h2 f4 60.♔g1 ♔e2–+.

56.♔h4?

White immediately returns the favour. 56.♗c1! would have drawn. The key to this move is that it stops ...a4-a3 and also prevents the black king from using the e3-square – the first example for us of the bishop's ability to carry out two tasks at the same time: 56...f4 57.♔g4 f3 58.♔g3 and Black immediately loses a pawn.

On the other hand, 56.♗f8? is insufficient, due to 56...f4 57.♔g4 f3 58.♔g3 ♔e3, followed by ...♔e2 and ...f3-f2-f1=♕.

56...f4 57.♔h3

The white king continues its struggle to get in front of the pawn.

If 57.♔g4 a3! 58.♗xf4 a2–+.

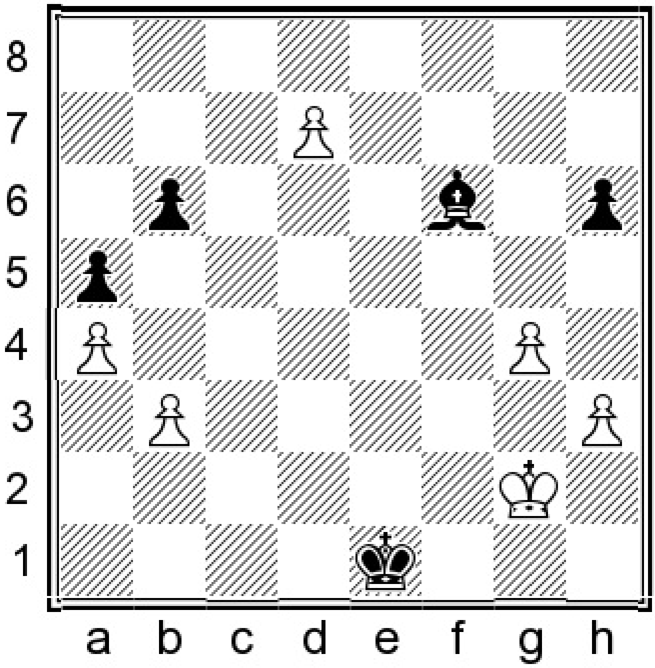
57...♔f3!

The same *bodycheck* as in the note to move 55, one square further on. The white king will be unable to get in front of the pawn.

58.♔h2 a3! 59.♔g1 a2 60.♗g7 ♔e2! 0-1

Now for an example with more pawns, although the principles are the same.

Mammed Nurmamedov
Anatoly Volovich
USSR 1960



White to move

The black king is very distant. Its task will be to capture a pawn on the queenside and create counterplay. But White can set up a *pants* situation by transforming the h-pawn into a passed pawn, and this is very fast:

1.♔g3!

The white king has to support the h3-h4 advance. Instead, 1.♔f3?? even loses, because the black king can change direction with 1...♔d2 2.♔f4 ♔e2!! 3.♔f5 ♗g5 4.♔g6 ♔f3 5.d8=♕ (5.♔h5 ♔g3) 5...♗xd8 6.♔xh6 ♔f4, and the white pawns are halted.

1.♔g3! ♔d2 2.h4!

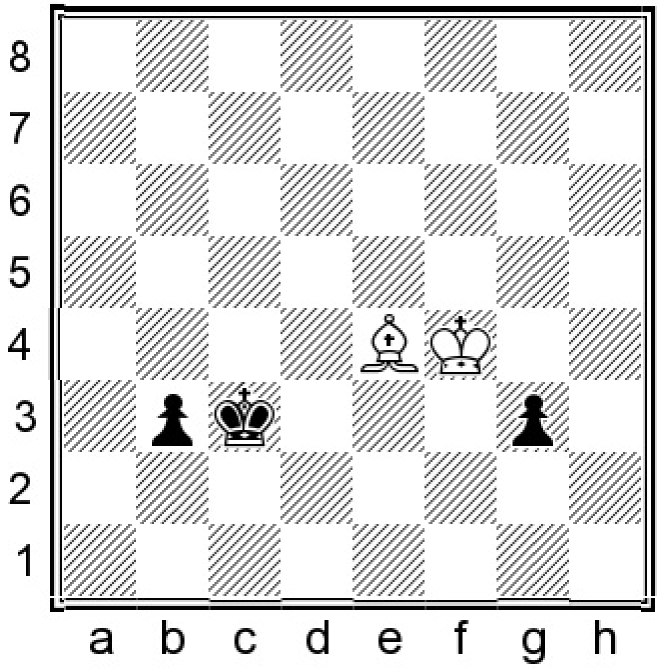
Not 2.♔f4? ♔e2! and we are in the previous variation.

2...♔c3 3.g5! hxg5 4.h5!+–

The black bishop is unable to stop the pawns, because there is no diagonal on which it can keep an eye on both of them. Meanwhile, the black king is too far away to help.

The work of the side with the bishop is not over when the king is about to capture one of the pawns, sometimes not even when it has captured it. He has to make sure the bishop can stop the other pawn.

Anthony Kosten 2510
Andras Adorjan 2520
Esbjerg 1988



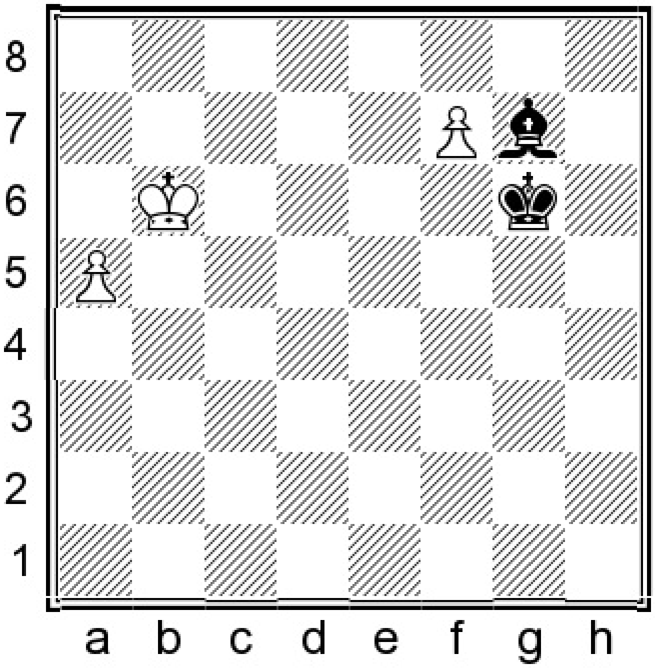
Black to move

Here, where both pawns appear to be amply controlled, all it requires is one move of the black king to destabilise White’s defensive framework:

62...♔d4! 63.♔f3 g2 0-1

In the next example, the attacker’s king takes personal control of the square needed by the bishop:

Richard Bates 2345
Thiago Stolte Bezerra
Guarapuava 1995



White to move

The f7-pawn will fall, but the white king can prevent the bishop from reaching the critical diagonal:

54.♔c5! ♗h6 55.♔d4!

Brilliant; the bishop is unable to reach the g1-a7 diagonal in time.

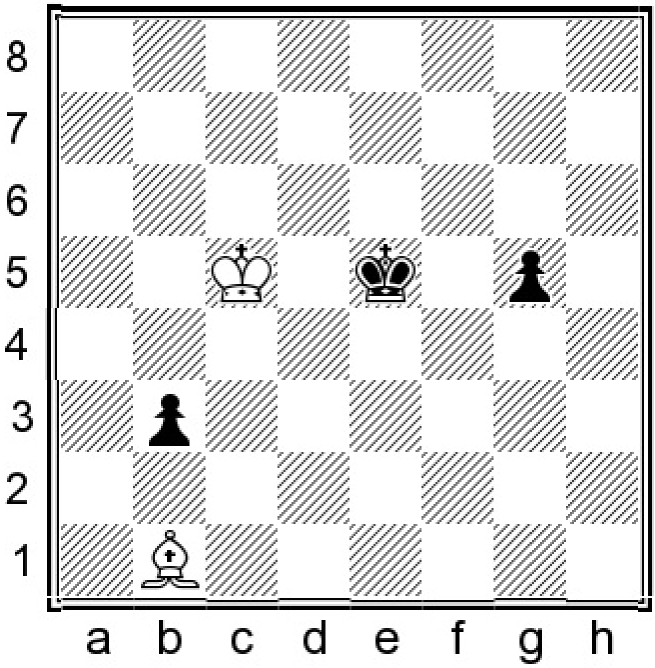
55...♔xf7

If 55...♗g7+ 56.♔e4 ♗f8 the bishop is still too late: 57.a6 ♗c5 58.a7, and one of the pawns queens.

56.a6 ♗g7+ 57.♔d5 1-0

We shall now see an example in which the king is successful in helping the bishop.

Dragi Dimitrievski 2220
Ljubisa Andonovski 2300
Struga tt 2008 (6)



White to move

This is a neat position which is a very good illustration of the concept of the division of labour: the bishop does a good job stopping the b-pawn and the king (in some variations) must deal with the g-pawn, although this seems very distant.

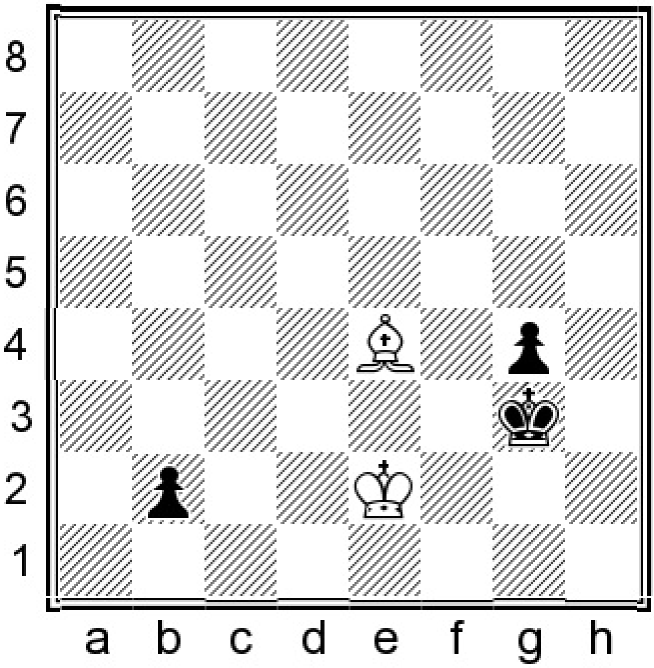
71.♔c4! g4 72.♔d3!

For the time being, White does not succumb to the temptation to play 72.♔xb3 g3 and the bishop is unable to stop the pawn.

72...♔f4 73.♔e2 ♔g3 74.♗e4 b2

This neutral move, which leaves White no option but to wait and see what decision the black king takes, is perhaps the cause of the later mistake.

Chess players find it hard to make waiting moves.



75.♔d2

75.♔e3! might have been the most effective move here, since it pushes the black king towards the h-file and after 75...♔h3 there is time to reach the b-pawn with 76.♔d2 g3 77.♔c2=.

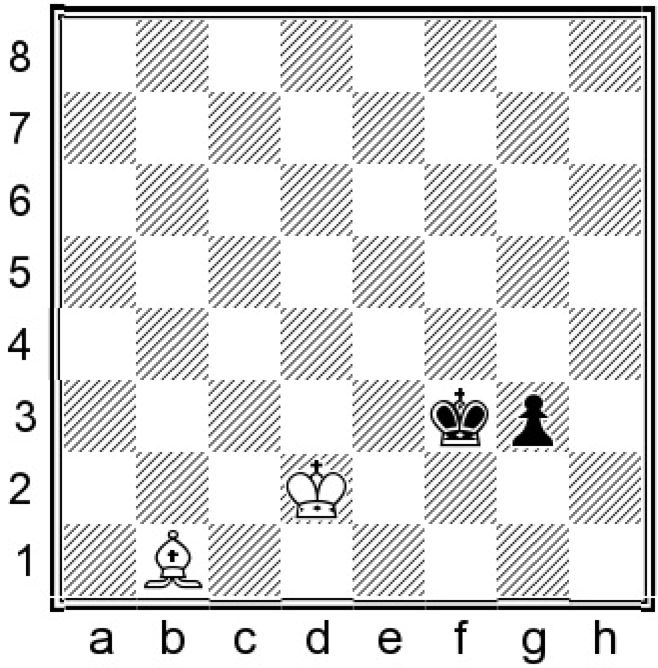
75...♔f4

With the white king on d2 it is natural for the black king to opt for harassing the bishop.

76.♗b1 ♔f3 77.♗a2

Threatening 78.♗d5+ and 79.♔c2.

77...b1=♕ 78.♗xb1 g3


Black sets one last trap, and it works.

79.♗e4+??

A blunder, due to inadequate knowledge of king and pawn endings, or perhaps the result of an overvaluation of the concept of the opposition. 79.♗a2 was the simplest move to draw.

79...♔xe4 80.♔e2 ♔f4!

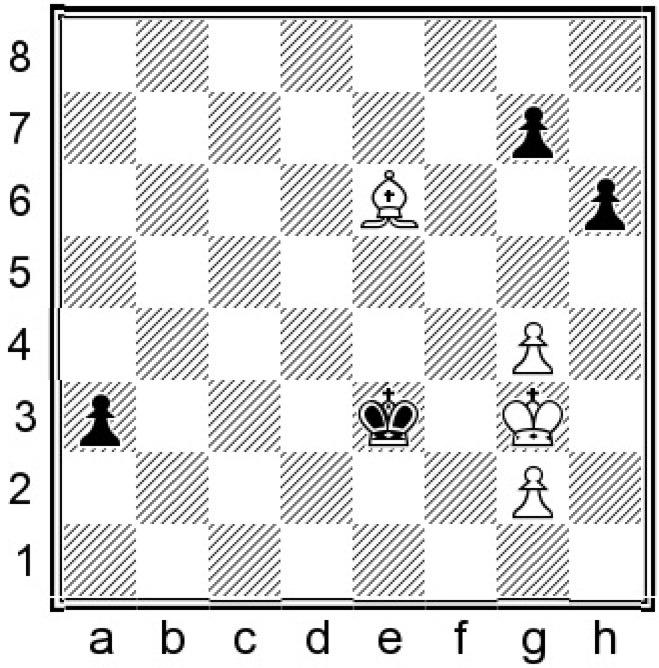
And the pawn ending is lost.

81.♔e1 ♔e3 82.♔f1 ♔f3 0-1

Pattern 22 The double function of the bishop

The bishop is often busy controlling a distant passed pawn and cannot leave a particular diagonal. But even so it can choose squares on that diagonal and influence the struggle between the kings on the other wing. This ability to control the enemy king's squares and to lose tempi in order to bring about zugzwang is enough to tip the balance in many cases, but not all.

Vladimir Kramnik 2791
Magnus Carlsen 2802
London 2010 (6)



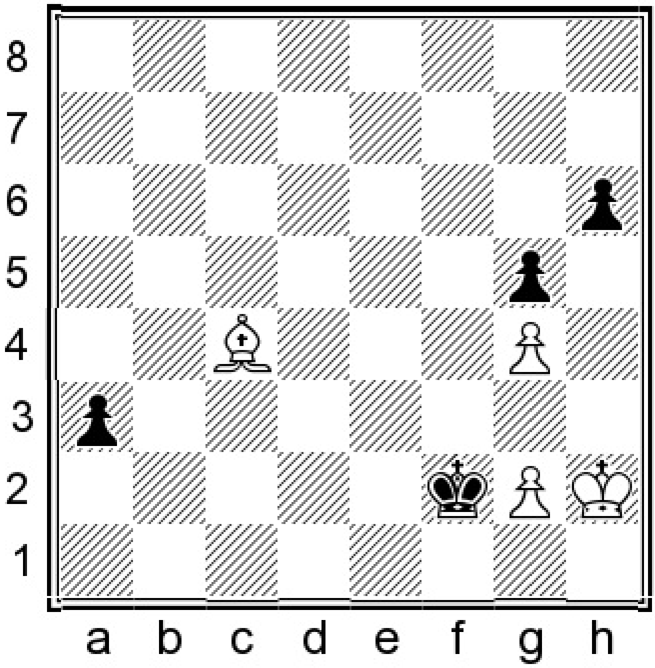
White to move

This position from a high-level tournament caused a sensation and a good deal of analysis a few years ago. It is another demonstration of how difficult positions with few pieces can become, even for the world's best players. White can win, using the mechanism of the double function of his bishop (in this case a very common one: stopping a passed pawn and controlling some of the enemy king's squares), but he can only do it effectively if he gives up a pawn now:

70.g5!

We are going to take this move, which was not played in the game, as our main line, not because it is best, but because it leads to positions which are more interesting for us to discuss.

The continuation of the game was 70.♔h4? ♔f2! 71.♗d5 g6! 72.♔h3 g5!. From now on, the help of the bishop will not be sufficient for the white king to capture the pawns: 73.♔h2 ♔f1 74.♗e6 ♔f2 75.♗c4!.



This is the moment for the bishop to assume the double task: stopping the pawn and depriving the black king of the f1-square. This allows White to make progress but it is not sufficient, because the black king maintains the defence on e3 and e4 and cannot be expelled from there: 75...♔e3 76.♔g3 ♔d4! (76...♔e4 77.♗a2 ♔e3 78.♗d5 – double function, once again, but 78...♔d4 79.♗a2 ♔e3=) 77.♗e6 ♔e3 (77...♔c3? 78.♔f3 ♔d4 79.♗f7 ♔d3 80.♗a2 ♔d4 81.♗b1?! (81.♗f7 ♔d3 82.♗g8 ♔d4 83.♔e2 ♔e4 84.g3) 81...♔c3!= 82.♗a2!) 78.♔h2 ♔f2 79.♗c4 ♔e3 80.♔g1 ♔f4 81.♗e6 (once again the bishop assumes the double task, but once again it is not enough to win) 81...♔e5 82.♗b3 ♔f4 83.♗e6 ♔e5 84.♗b3 ♔f4 85.♗e6 ♔e5 86.♗b3 ½-½.

70.g5!

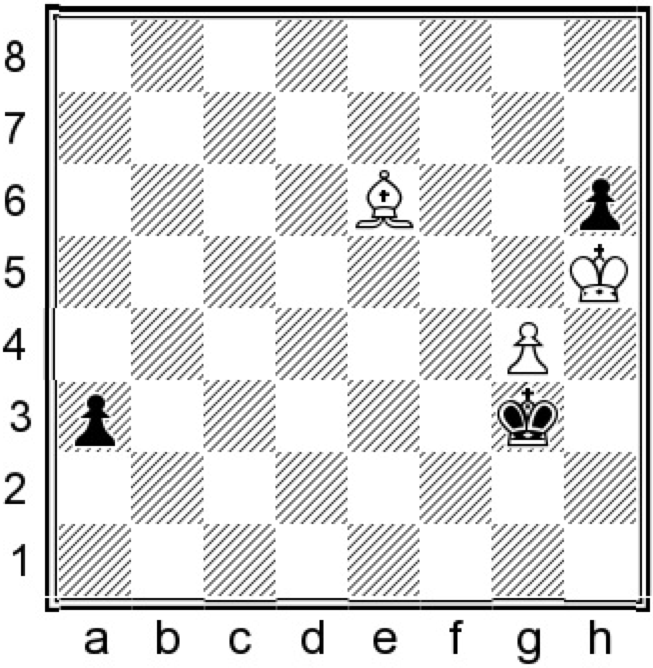
Let's return to the main line: White has three options and from comparing them we can draw many conclusions.

70...hxg5

No doubt the natural and most interesting try.

70...h5?! 71.♔h4 g6 72.g4 hxg4 73.♔xg4 also leads to a position in which the bishop has to help the king to eliminate the bodychecks and ultimately capture the pawn on g6, but here the process is trivial, for example 73...♔e4 74.♗a2 ♔e5 (74...♔e3 75.♗f7 ♔d4 76.♔f4 ♔c3 77.♔e5 is easier) 75.♗f7 ♔d6 76.♔f4 ♔e7 77.♗a2 ♔d6 78.♔e4 ♔e7 79.♔e5 ♔f8 80.♔f6+–.

70...♔e4 leaves White with a decision which proves to be very interesting: 71.♔g4! (71.gxh6? gxh6 leads to a drawn position, because the bishop cannot help the king to capture the pawn on h6: 72.♔g4 ♔e3! (the black king must go on the counterattack; 72...♔e5?! 73.♗a2 ♔f6? 74.♔f4 ♔g7 75.♔f5 ♔h7 76.♔f6+–) 73.♔h5 ♔f2 74.g4 ♔g3.



analysis diagram

It is paradoxical, but instructive, that if the bishop defends its pawn, it cannot deny the black king access to the appropriate squares, and White is unable to win the h6-pawn: 75.♗a2 ♔f4 76.♔h4 ♔f3 77.♗e6 ♔f4 78.♗d5 ♔e5 79.♗a2 ♔f4=) 71...♔e3 72.g3 ♔f2 73.♗d5 ♔e3 74.♔f5 ♔f2 75.g6 (75.g4?? again lands in the position in which the bishop cannot help the king: 75...hxg5 76.♔xg5 ♔g3=) 75...♔xg3 76.♔e6 h5 77.♔f7 h4 78.♔xg7 h3 79.♔f6 h2 80.g7 and the white pawn queens with check.

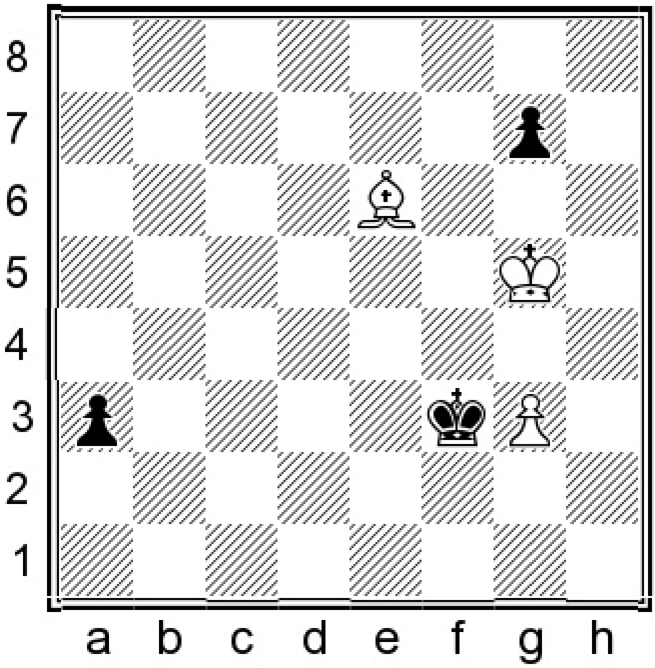
71.♔g4

From now on White’s plan is clear: place the pawn on g3 and then with successive triangulations with the bishop, capture the black pawns, without the black king being able to capture White’s g-pawn.

71...♔f2 72.g3 ♔e3

A similar situation arises after 72...♔g2 73.♗g8 ♔f2 74.♗d5 g6 75.♗g8 ♔g2 76.♗f7 ♔f2 77.♗d5 and the black king has to move, losing the first pawn: 77...♔g1 78.♔xg5 ♔f2 79.♔f4 (it was still not too late to err with 79.g4? ♔g3=) 79...♔e2 80.g4 ♔f2 81.g5+–.

73.♔xg5 ♔f3



74.♔h4!

There is always time to make a mistake. If 74.g4? ♔g3 and with the pawn having to be defended by the bishop, once again it is unable to deny squares to the black king.

74...g5+ 75.♔h3 ♔f2 76.♔g4 ♔g2 77.♗a2 ♔f2 78.♗d5+–

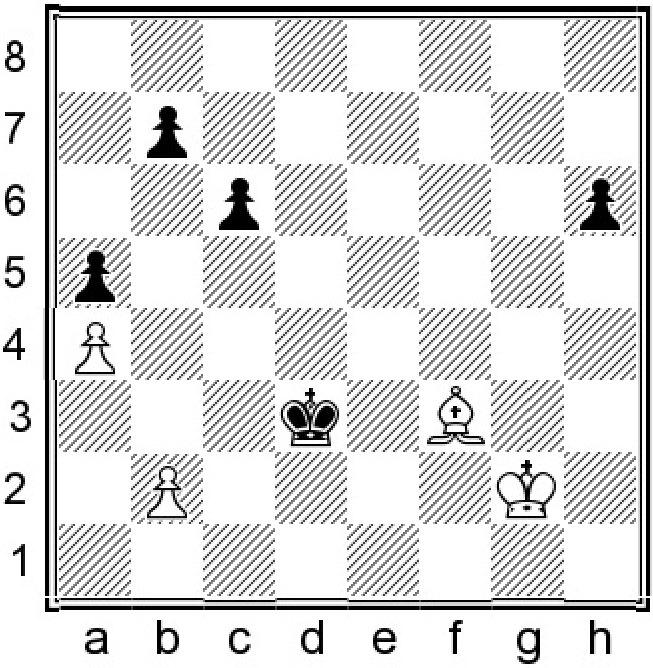
Zugzwang, thanks to the bishop's double function: it controls both squares from where the black king could maintain the attack on the g3-pawn.

Conclusion

When the bishop takes on the double task of stopping a pawn and helping his king on the other wing, it is usually better if the bishop does not defend the last pawn but the squares around it, in order to reach zugzwang.

The bishop's double function can consist of stopping passed pawns on both wings, helping his king on one of them.

Zbigniew Ksieski 2400
Christian Bartolomaeus 2200
Leipzig 1996 (4)



White to move

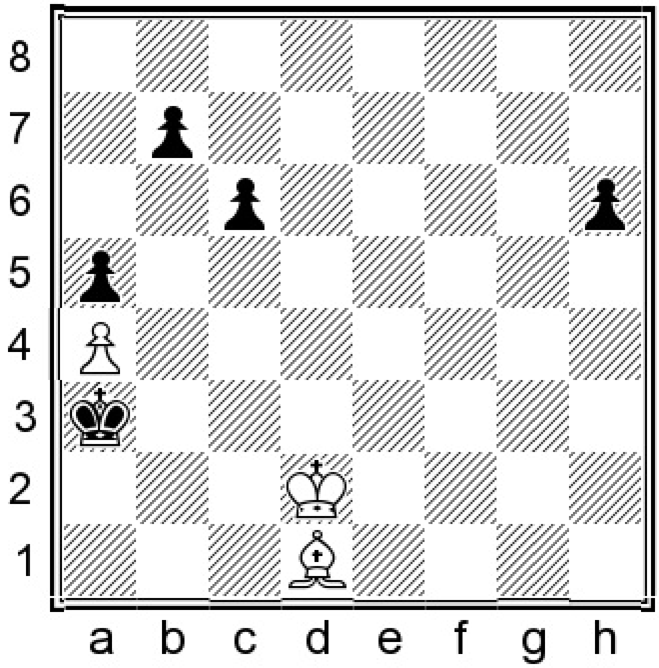
White is faced with a crucial decision, which can be resolved either by deep calculation or by using common sense. The bishop is already stopping the distant passed h-pawn and could be placed on d1, while the white king must move across to defend the more vulnerable wing.

We are going to follow that tenacious variation, even though in the end it is also losing.

58.♔f2!

The game continued 58.♗g4?. The bishop sets off to capture pawns, but the adventure will conclude with the loss of one: 58...♔c2 59.♗c8 b6 60.♗d7 c5 61.♔f3 ♔xb2 62.♗b5 (finally we reach a position in which the bishop is faced with two very widely separated pawns, and with the black king very well placed) 62...h5! 63.♔e2 h4 64.♔d3 ♔b3 65.♔d2 h3 66.♗d7 h2 67.♗c6 ♔c4 (67...c4! 68.♗d5 ♔b2 was even easier) 68.♔c2 ♔b4 69.♔b2 c4 70.♔c2 ♔c5 71.♗a8 b5 72.axb5 ♔xb5 73.♔c3 a4 74.♗h1 a3 75.♗g2 a2 76.♔b2 ♔b4 77.♔xa2 ♔c3 0-1.

58.♔f2! ♔c2 59.♔e2 ♔xb2 60.♔d2 ♔a3 61.♗d1!



The most interesting position of the analysis; Black has a natural continuation, which does not win, and we are going to take that as our main line, and another one, which looks strange but which will demonstrate its logic.

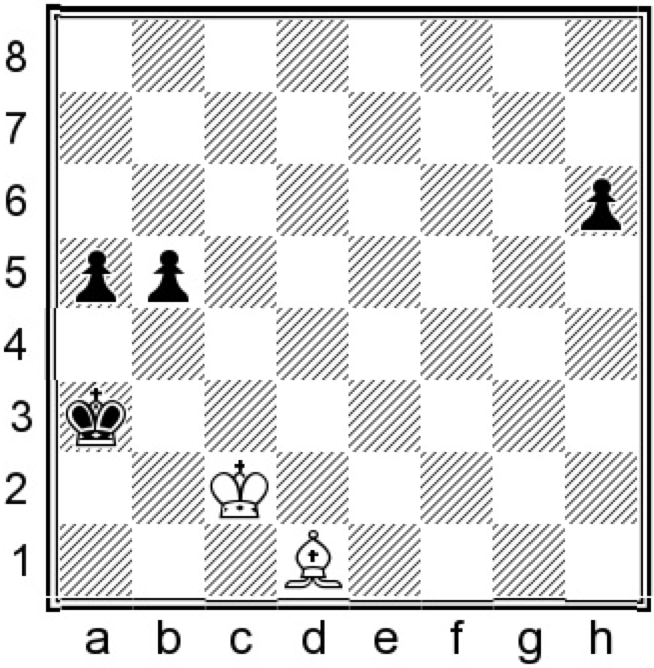
61...b5?

Creating three passed pawns and allowing us to see the effectiveness of the bishop from its stable position, working on two diagonals, in the shape of a V.

61...♔b4!, preparing the advance of the c-pawn or the exchange of pawns on b5, followed by recapturing with the king, wins, for example 62.♔c1 (62.♔d3 c5 63.♔d2 c4 and White is in zugzwang, although even if it were Black to move he could count on the reserve tempo ...b7-b6: 64.♗f3 ♔b3! 65.♔c1 ♔xa4, with a finish similar to the one in the 62.♔c1 variation) 62...b5 (62...c5? 63.♔b2! and Black should not win) 63.axb5 and now the surprising 63...♔xb5!. The pawns are left separated but the black king returns to b4 and ensures their advance to c3 and a3, when the finish might be something like 64.♔b2 ♔b4 65.♗h5 c5 66.♗e2 c4 67.♗h5 a4 68.♗d1 c3+ 69.♔c2 a3 70.♔b1 ♔c4 71.♔a2 ♔d3 72.♔xa3 c2–+.

62.axb5 cxb5 63.♔c2!

63.♔c1? again loses due to 63...♔a2 and the advance ...b4-b3 cannot be prevented.



The most graphic position. The bishop helps the king on the queenside as well as controlling the very backward h-pawn.

63...a4

The white king cannot be prevented from deploying in front of the pawn, for example 63...♔a2 64.♗h5 b4 65.♗f7+ and the black king has to concede an effective position to the white king, either b1 or b3.

64.♔b1 b4 65.♗g4

And once the white king has gone to a1 the bishop can just mark time along the d1-h5 diagonal.

65...b3 66.♗h5 ♔b4 67.♗g4 a3 68.♗h5

But not 68.♗f3? ♔c3 69.♗h5 a2+ 70.♔a1 ♔c2 71.♗g6+ ♔c1.

68...♔c3 69.♗g6

Only now that the king is on c3 is it necessary to cover the c2-square, without allowing the h-pawn to advance, and for this the only useful square is g6.

69...a2+ 70.♔a1 ♔d2 71.♗f7!

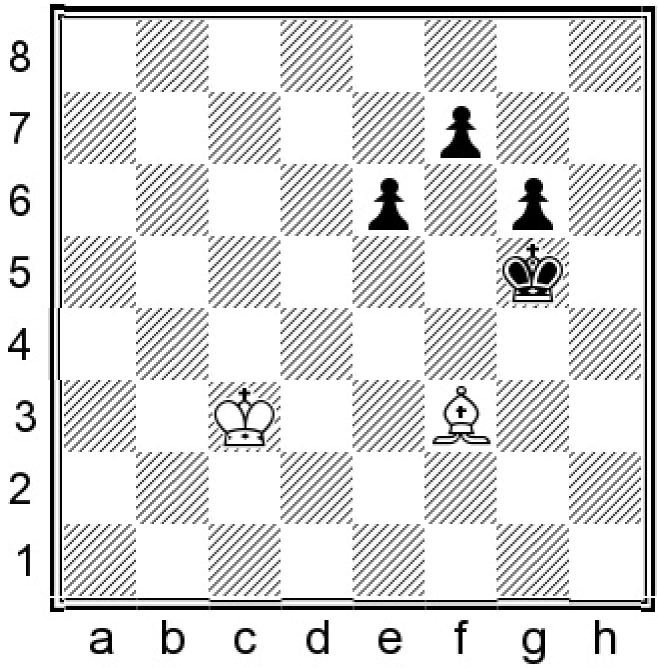
Not 71.♔b2 a1=♕+ 72.♔xa1 ♔c1.

71...♔c3 72.♗xb3=

Pattern 23 Bishop vs three pawns close together

When the enemy pawns are close together, the bishop's chances increase. A bishop almost always draws against three connected pawns, if it receives the help of its king. I would say that this is profoundly counterintuitive, so it would be useful to analyse a few positions in order to be persuaded of this. Averbakh analysed several positions with wing pawns, and now we shall look at a tournament game at the highest level.

Boris Gelfand 2665
Robert Hübner 2615
Munich 1992 (4)



White to move

43.♗c6 e5 44.♔d3 f5 45.♔e3 ♔f6 46.♗e8

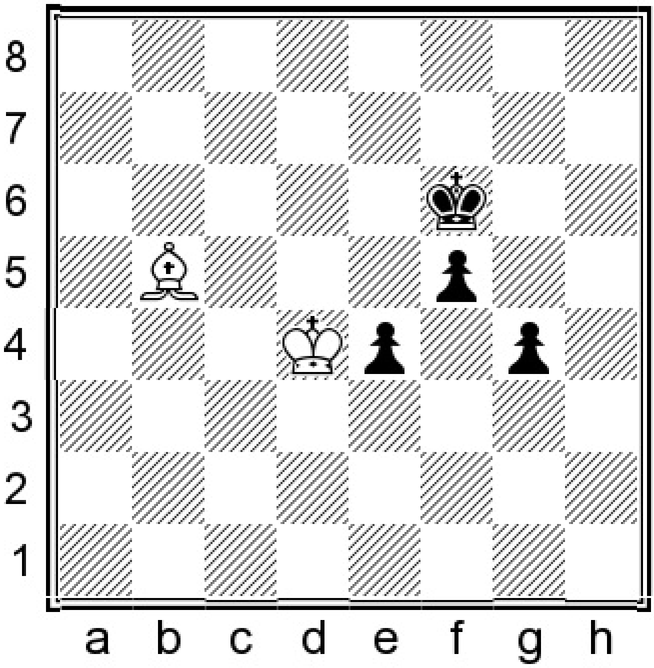
Following the strategy of targeting the pawns, which is familiar from endings with bishops of opposite colour.

But other moves also work. The critical moment comes later.

46...e4

46...g5 is the only other way to advance the pawns, when the simplest and most advisable defence, although not the only one, is to place the bishop so that it attacks the pawns from behind: 47.♗d7 g4 48.♗c8 ♔g5 49.♗d7 e4 (49...f4+ 50.♔e4 f3 51.♔e3 ♔h4 52.♔f2 ♔g5 53.♔e3, and Black can make no progress) 50.♗b5! (against the threat of 50...g3) 50...g3 51.♗f1! ♔g4 52.♗g2! and again Black can make no progress.

47.♔d4 g5 48.♗b5 g4



In this structure, White must prevent the black king from going to e5 or f4.

49.♗f1

Let us see what happens if we allow the black king to advance: 49.♔e3? ♔e5!. This is one of the winning positions, which also applies if everything is shifted one file to the right, but not one rank further back: 50.♗f1+ f4 51.♔f2 e3+ 52.♔e1 f3, followed by ...g4-g3-g2.

49...♔g5 50.♔e3!

The draw is near; when the black king moves the white monarch will embed itself between the pawns.

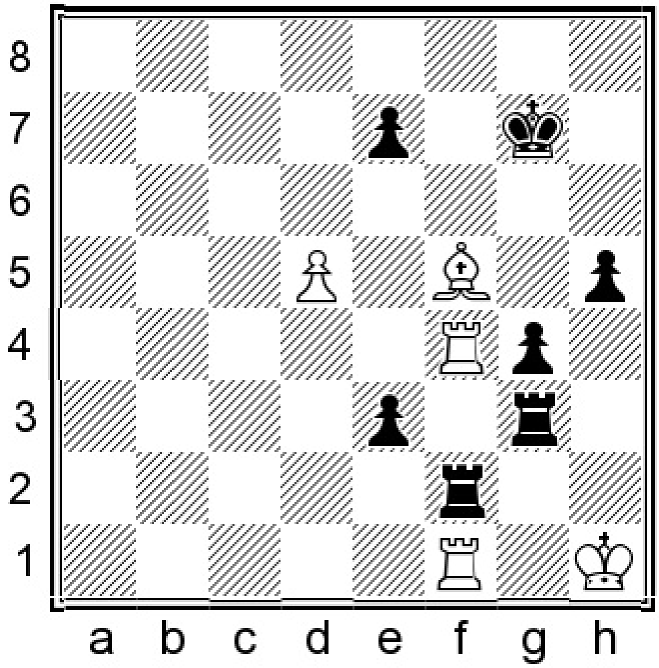
50...♔h4

Or 50...g3 51.♗h3=.

51.♔f4 e3 52.♔xe3 ♔g3 53.♗b5 f4+ 54.♔e2 ♔g2 55.♗c6+ f3+ 56.♔e3 ♔g3 57.♗d5 f2 58.♔e2 ½-½

As it happens, the following game was played as I was revising this chapter and following the Spanish Championship in the city of Linares.

Daniel Alsina Leal 2484
Alexei Shirov 2647
Linares 2020 (5)



Black to move

Shirov had played a brilliant game, but now the win becomes complicated. Perhaps he thought the ending with three extra pawns was easily won.

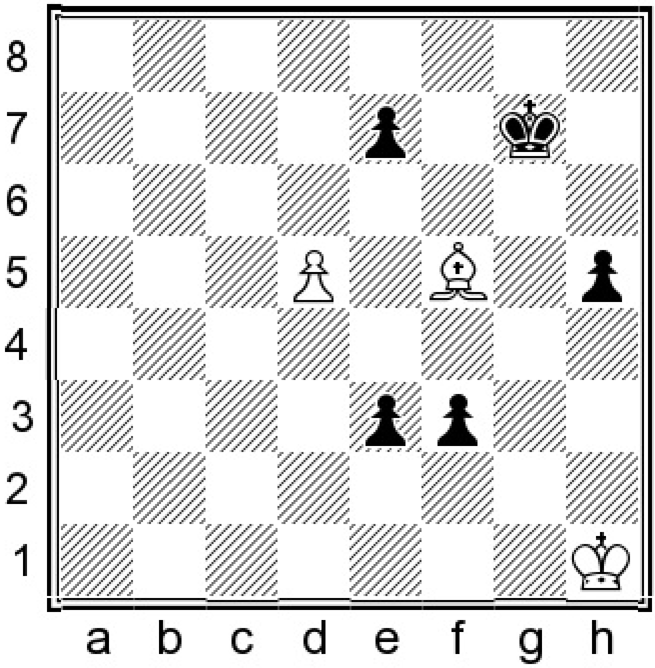
37...♖xf4?

37...♖xf1+ 38.♖xf1 e2 39.♖e1 ♖f3 40.♖xe2 ♖xf5 41.♖xe7+ ♔f6 42.♖d7 ♔g5 does indeed win, with a modicum of care.

37...♖xf4? 38.♖xf4 ♖f3

Now 38...e2 39.♖e4 ♖f3 40.♖xe7+ ♔f6 41.♖xe2 ♔xf5 42.♖d2 produces a position where the different deployment of the white rook makes his d-pawn stronger and suffices to draw.

39.♖xf3 gxf3



This is the position that interests us. We have the ending with three passed pawns against the bishop, but they are all very close together.

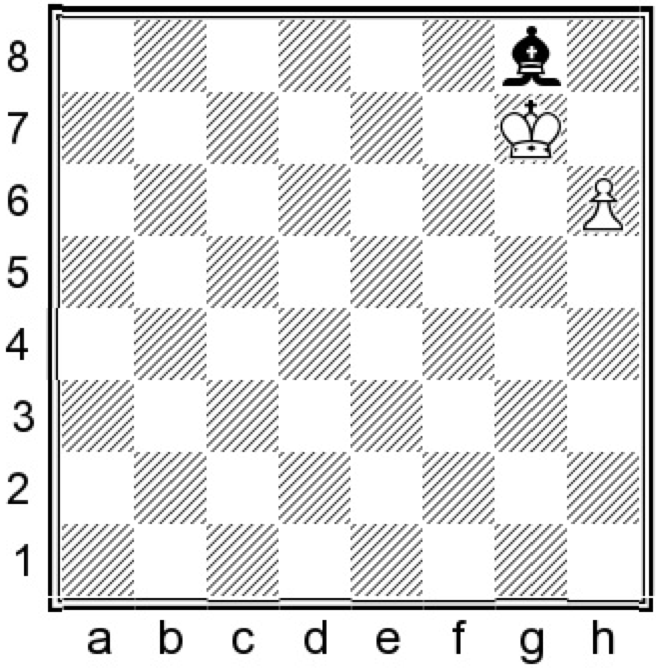
40.♔g1 ♔f6 41.♗e4 f2+ 42.♔f1 ♔g5 43.♗g2 ♔g4 44.♔e2 ♔f4 45.♗h3 h4 46.♗f1

And now all three pawns are under control.

46...♔e4 47.♗g2+ ♔d4 48.♗f1 ½-½

We shall conclude this chapter with two patterns that are mainly tactical.

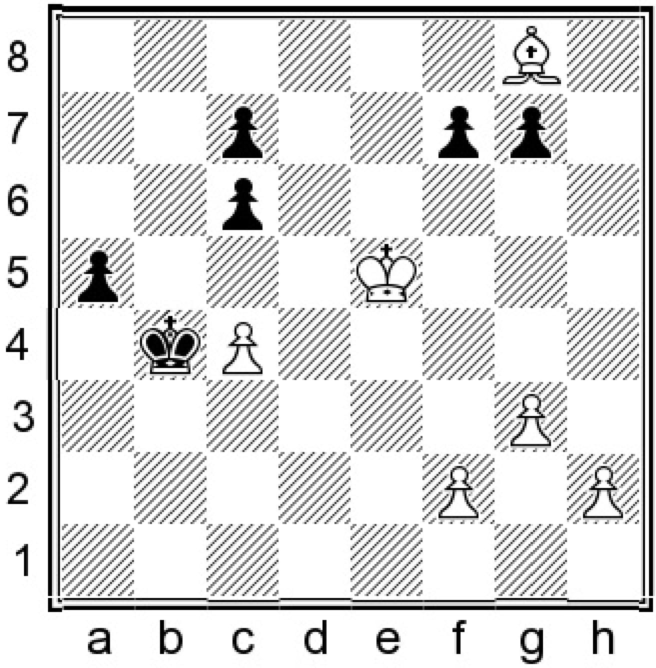
Pattern 24 The shortest diagonal



The shortest diagonals on the board are the ones consisting of two squares which border each of the four corners. A diagonal of two squares can be completely controlled by the king, and a bishop can be ejected from it.

This circumstance, reflected in the diagram, sometimes arises when a bishop has to fight against passed pawns. In that case the bishop can be just as clumsy as the knight when fighting against a rook’s pawn. We shall look at this in the next examples.

Raimundo Garcia
Jorge Rubinetti
Buenos Aires 1972 (10)



Black to move

Black has just sacrificed a knight. Now he completes the combination by blocking off the longer diagonal a2-g8 and thus restricting the bishop to the very short diagonal b1-a2 in order to stop the pawn.

35...c5!

Every tempo counts. The white bishop is not given time to reach any square other than b1, and the black king is able to easily eject it from there. Not 35...a4? 36.c5!, opening the long diagonal a2-g8.

35...c5! 36.♗xf7

If 36.♗h7 g6!.

36...a4 37.♗g6 a3 38.♗b1

The bishop has made a big effort... to no avail.

38...♔b3

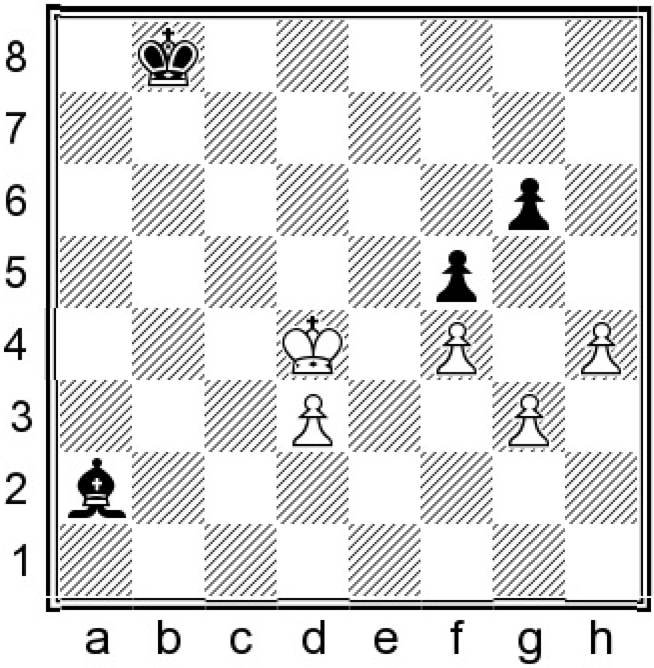
Here, though, one tempo makes all the difference! It is essential to play this move (or 38...♔c3) immediately, otherwise the position is drawn, due to the incarceration of the king on the a-file, e.g. 38...c6? 39.♗a2 ♔c3 40.♔e4! ♔b2 41.♔d3 ♔xa2 42.♔c2 g5!, followed by ...♔a1 and ...a3-a2.

39.h4 ♔b2

And the bishop is ejected, once again, from the short diagonal.

40.♗a2 ♔xa2 0-1

Vojtech Zwardon 2446
Natasa Richterova 2187
Ostrava 2016 (2)



Black to move

Here we shall see a beautiful example of the *division of labour*.

52...♔c7?

Now the g6-pawn will fall and the h-pawn will be unstoppable. It was essential to entrust the bishop with the defence of the g6-pawn and that is only possible from the h5-square, leaving the king to restrain the passed pawn on the d-file: 52...♗b3! 53.♔e5 ♗d1 54.♔f6 ♗h5 55.d4 ♔c7 56.♔e7 ♔c6 57.♔e6 ♔c7=.

52...♔c7? 53.♔e5

Now the g6-pawn can no longer be defended and subsequently the h-pawn will prove unstoppable, thanks to the short diagonal.

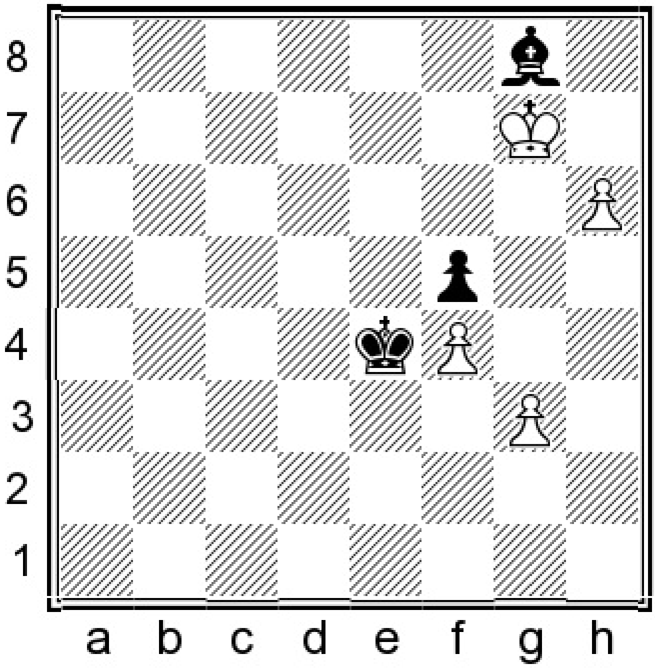
53...♗f7 54.♔f6 ♗e8 55.♔e7 ♗b5 56.d4?

Very surprising; perhaps it was a miscalculation, but maybe White simply lacked confidence in the great strength of his h-pawn. Let us see: 56.♔f7! ♗xd3 57.♔xg6 ♗b5 (57...♔d7 58.h5 ♔e7 59.h6 ♔f8 60.h7) 58.h5 (58.♔xf5 also wins, as the black king is very distant) 58...♗e8 59.♔g5 ♗f7 60.h6 ♗g8 61.♔g6 ♔d7 62.♔g7+–.

56...♔c6?

Here 56...♗e2!, with the same division of labour as before, would have led to a draw. The bishop defends the g6-pawn and the king restrains the d-pawn.

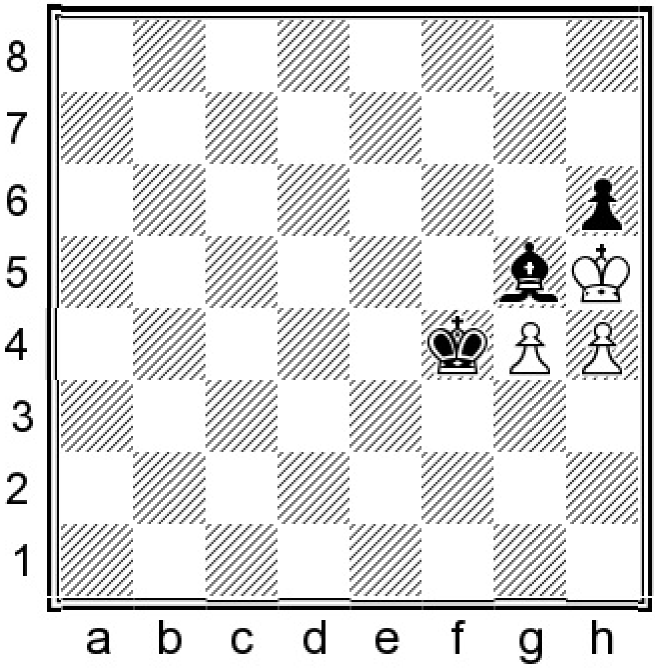
57.♔f6 ♔d5 58.♔xg6 ♔xd4 59.h5 ♗e8 60.♔g5 ♗f7 61.h6 ♗g8 62.♔g6 ♔e4 63.♔g7



The shortest diagonal in action once again.

63...♔f3 64.♔xg8 ♔xg3 65.h7 1-0

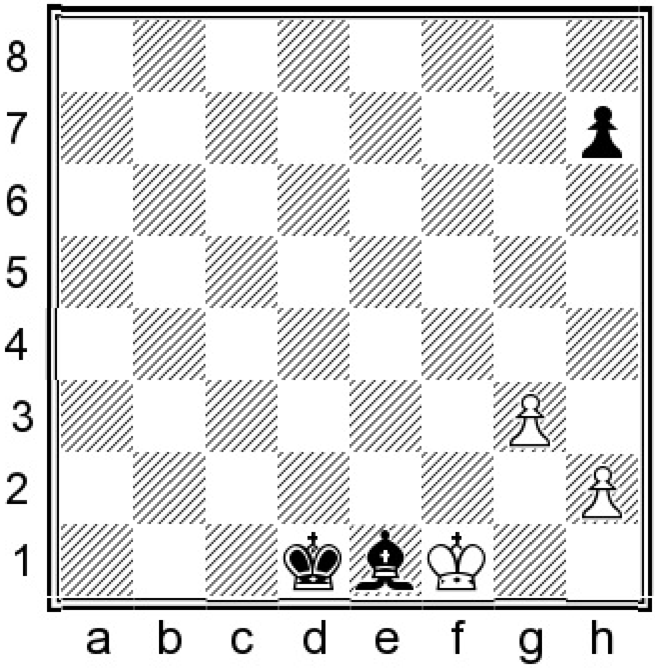
Pattern 25 When the pawn is more valuable than the bishop



There is a sacrifice of the bishop to prevent the exchange of the last pawn, which has become thematic. The fact is that a bishop versus a pawn is always a draw, whereas a pawn versus a pawn sometimes wins.

Let us begin with a case with the wrong rook's pawn, one which has occurred many times.

Artashes Minasian 2581
Loek van Wely 2648
Khanty-Mansiysk 2005 (1)



White to move

White's two pawns should be more than sufficient to draw, so it ought to be easy, but sometimes having so many ways to draw leads to relaxation, then panic and finally defeat.

69.♔g2

69.g4 h6 70.h4 is in my opinion the easiest solution.

69.♔g2 ♔e2 70.♔h3?!

White starts to get himself into a mess, although this is not yet losing.

70...♔f3 71.♔h4??

71.g4! was now the only move (of course White only had two legal moves anyway): 71...♗d2 72.g5!=. From now on, Black shows that he is familiar with the theme, and he gives White no choice.

71...♗d2! 72.♔h5

If 72.g4 h6 73.♔h3 ♔f2! 74.g5 ♗xg5! and the h2-pawn prevents its king from reaching the corner, although Black must display some finesse: (74...hxg5?? fails to 75.♔g4, followed by h2-h4=) 75.♔g4

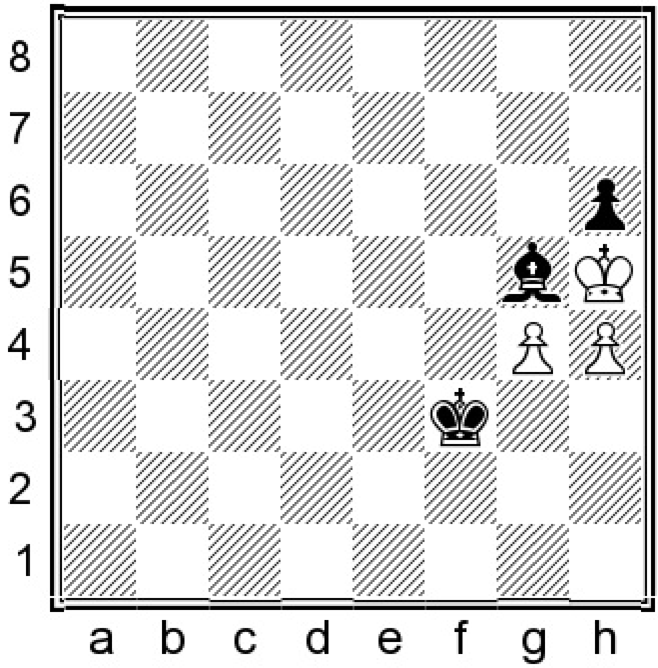
♔g2 76.h4 ♗c1 77.h5 ♗g5 78.♔f5 ♔f3! 79.♔e5 ♗e3! 80.♔d5 ♔g4 81.♔e4 ♗a7 82.♔d3 ♔xh5 83.♔e2 ♔g4 84.♔f1 ♔g3, and the king is unable to reach the corner.

Or 72.♔h3 h6 73.g4 ♔f2!, transposing to 72.g4.

72...h6 73.g4

With White's king so far from the corner, White tries to exchange the last black pawn, but he will end up capturing the bishop instead.

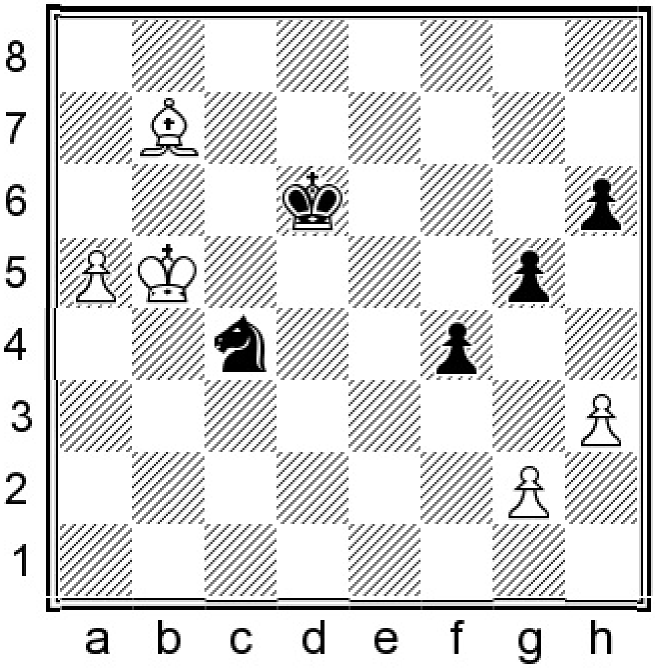
73...♗g5! 74.h4



74...♔f4!

This is the set-up that we should remember. Black wins. It also works on other files and other ranks.

Ivan Sokolov 2645
Rustem Dautov 2625
Ter Apel 1995 (5)



Black to move

It is not usually the case, but sometimes the patterns we study do us harm; all the more reason to study them carefully and not just superficially. Apparently, here Black thought his knight was very clumsy against the a5-pawn and that he had to sacrifice it. It might also be that he simply miscalculated. Finally, it is obvious that this was a bad division of labour.

56...♘xa5?

56...♘e3 57.a6 (57.♔b6 ♘c4+ repeats) 57...♔c7! 58.♗e4 (this looks impressive, but the black king occupies a7 and the knight does the job of exterminating pawns) 58...♔b8 59.♔b6 ♘c4+ 60.♔c5 ♘e3 61.♔d4 ♔a7 62.♗b7 h5 (the easiest, although Black can also keep waiting) 63.♔e5 (63.g3? ♘f5+) 63...g4 64.♔xf4 ♘xg2+! 65.♗xg2 gxh3 66.♗b7 h2= and the last pawn is exchanged.

56...♘xa5? 57.♔xa5 ♔c5

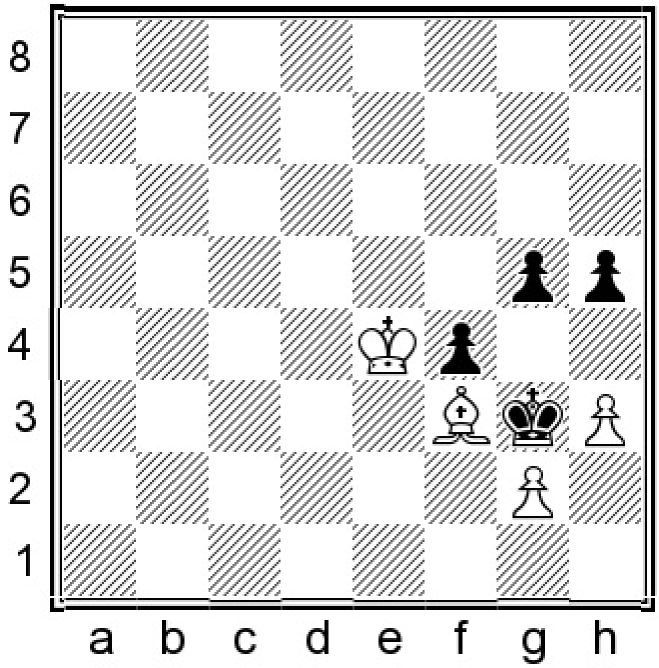
An effective bodycheck, but it is not sufficient.

58.♗f3!

The only winning move, preparing to sacrifice the bishop.

58...♔d4 59.♔b5 ♔e3 60.♔c4 ♔f2 61.♔d4 h5 62.♔e4 ♔g3

If 62...g4 63.hxg4 hxg4 64.♔xf4 and wins.



Black seems to be really close to his objective. If he was unaware of the idea, he could well have been relishing the draw.

63.♔e5 g4 64.hxg4 hxg4 65.♔e4! 1-0

Once again, the pawn is worth more than the bishop.

Chapter 4
Rook vs pawns

The struggle of the rook against several pawns is a very common situation, which usually evolves from a rook ending in which one side has to sacrifice the rook for a passed pawn. It needs careful study, not only because it occurs frequently but also because it contains a great wealth of ideas. The themes of *tail-hook* and *change of leader* have already been explained in the section on theoretical endings of rook against two pawns in *100 Endgames You Must Know*, so they are only recalled here in the odd example and do not have their own section as new themes.

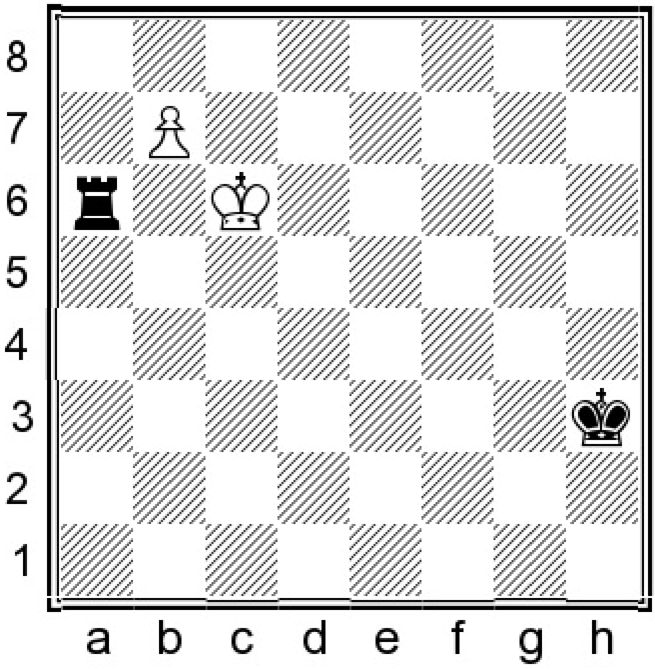
In this type of ending almost all players tend to overvalue the strength of the pawns (especially if they are connected), which leads to many mistakes in evaluation. Certainly, the pawns can win, but it is more usual for the side with the rook to be the one fighting to win.

The strategy is very different according to whether the side with the pawns is trying to win or draw. In order to win, it is necessary to advance more than one dangerous pawn, but if a draw is the aim, then the most advisable thing is to take up the most favourable position with the king and support only one of the pawns, abandoning the others to their fate.

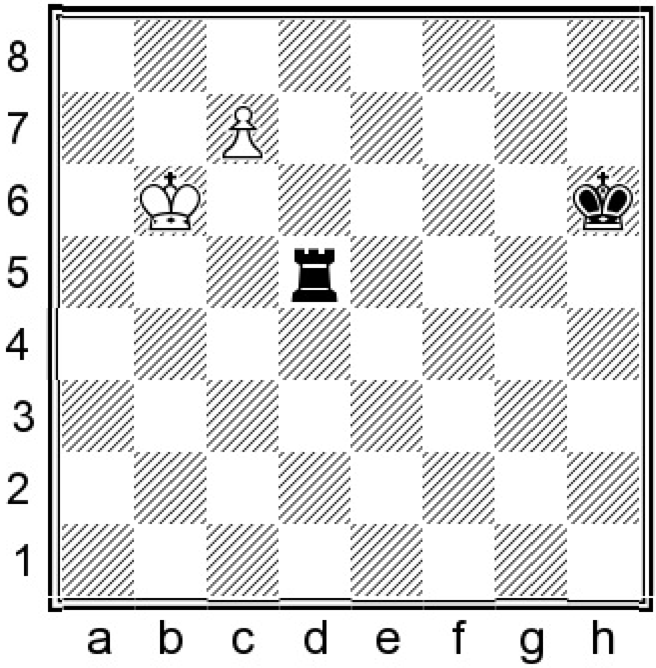
Pattern 26 The unstoppable pawn

Sometimes the rook is unable stop a solitary pawn and has to allow its promotion to a queen. Although this can happen in positions where there are many obstacles for the rook. there is also a situation where it cannot do so on an open board, and this should be learnt.

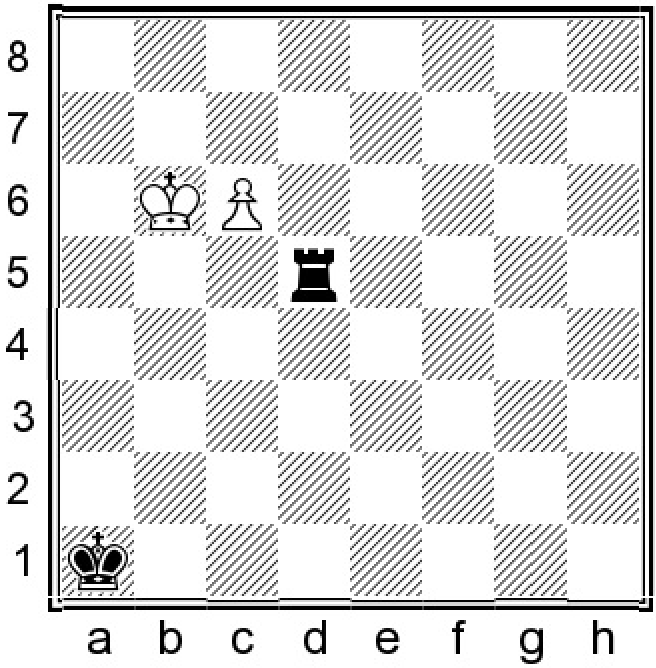
Series: The unstoppable pawn



Fenton-Potter 1875



Barbier 1895



Barbier/Saavedra 1895

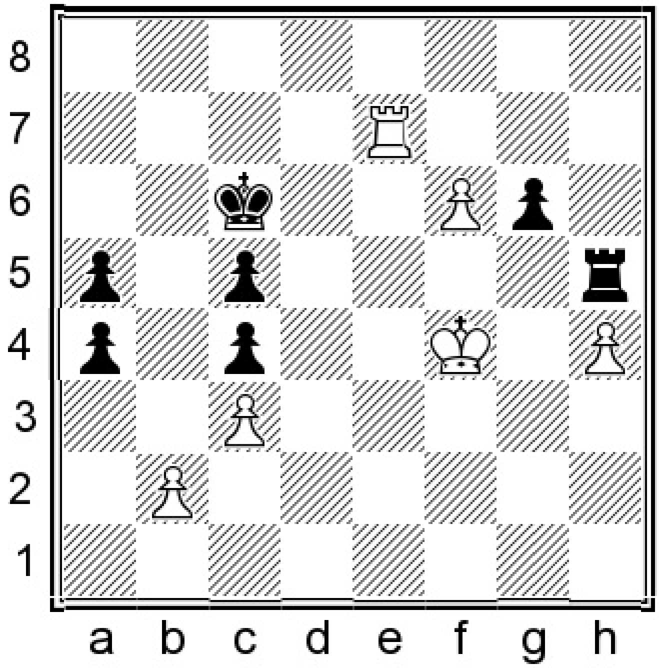
We start with a rather special series. In the first position, which arose in a game, the opponents agreed a draw, but White wins easily by bringing his king down the c-file, eventually moving from c3 to b2, specifically: 1.♔c5 ♖a5 2.♔c4 ♖a4 3.♔c3 ♖a3 4.♔b2 and the pawn will queen.

In the second, the columnist Barbier wanted to recreate the position, but he misremembered it, and curiously added in his commentary that with the black king on a1, the result would be a draw, because there is a stalemate idea, but one of his readers (Saavedra) corrected him, which gave rise to the third position, in which White wins with the continuation 1.c7 ♖d6 2.♔b5 ♖d5 3.♔b4 ♖d4 4.♔b3 ♖d3 5.♔c2 ♖d4 6.c8=♖!! (not 6.c8=♕ due to 6...♖c4+ and stalemate) 6...♖a4 7.♔b3 and mate cannot be prevented.

The whole story is very instructive in itself, as it reveals a lot about the results that human thought produces in a first approximation, and then by thinking more deeply, or what can be seen knowing the basic pattern or not knowing any.

Now let’s look at an example involving a greater number of pawns.

Peter Svidler 2765
Veselin Topalov 2800
Morelia/Linares 2006 (1)



White to move

In the diagram position, Black has just played 48...♖h5 and he seems to be solving all his problems, thanks to the threat of 49...♖f5+, but here White played the unexpected...

49.♖e5!!,

after which it appears that White will have to acquiesce to a repetition of moves or give up the rook:

49...♖xh4+ 50.♔g5 ♖h5+ 51.♔xg6! ♖xe5 52.f7

And the rook is unable to stop the pawn, although Black still has the classic barrage of checks and then some counterplay with his advanced pawns on the queenside.

52...♖e6+

52...a3 53.bxa3 ♖e6+ 54.♔g5 ♖e5+ 55.♔g4 ♖e4+ 56.♔f3! ♖e1 57.♔f2+– was easier than the game.

53.♔g5 ♖e5+ 54.♔g4 ♖e4+ 55.♔g3!

55.♔f3? is not sufficient to win, due to 55...♖e1 56.♔f2 ♖b1!.

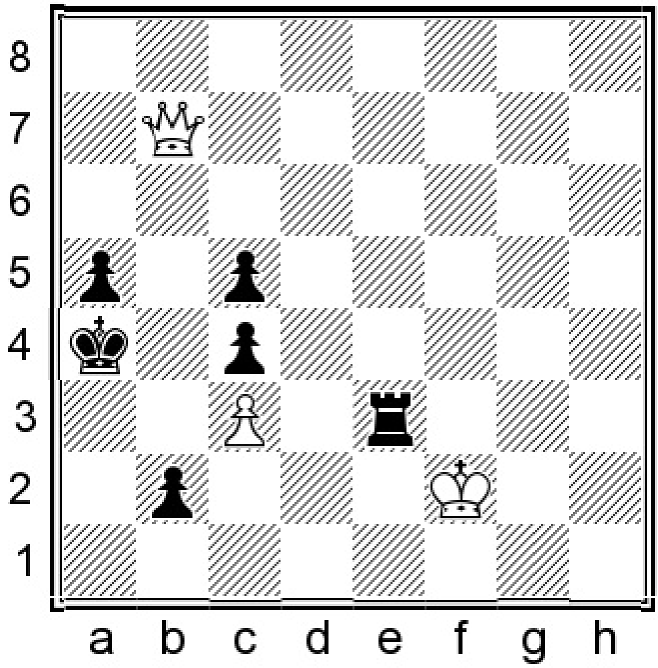
55...♖e3+

Or 55...a3 56.f8=♕ a2 (56...axb2 57.♕a8+!) 57.♕c8+! ♔b6 58.♕d8+ ♔b5 59.♕d7+ ♔b6 60.♕a4, winning the dangerous pawn.

56.♔f2 a3!? 57.f8=♕ axb2

Or 57...a2 58.♕c8+! ♔b6 59.♕d8+ ♔b5 60.♕d7+ ♔b6 61.♕a4, and once again the pawn falls.

58.♕c8+ ♔b5 59.♕b7+ ♔a4



Following the promotion we have moved into an ending of queen vs rook, which could well be placed in another section.

With his last move, Black has in mind some stalemate ideas that we shall see again in the relevant chapter, but White is vigilant:

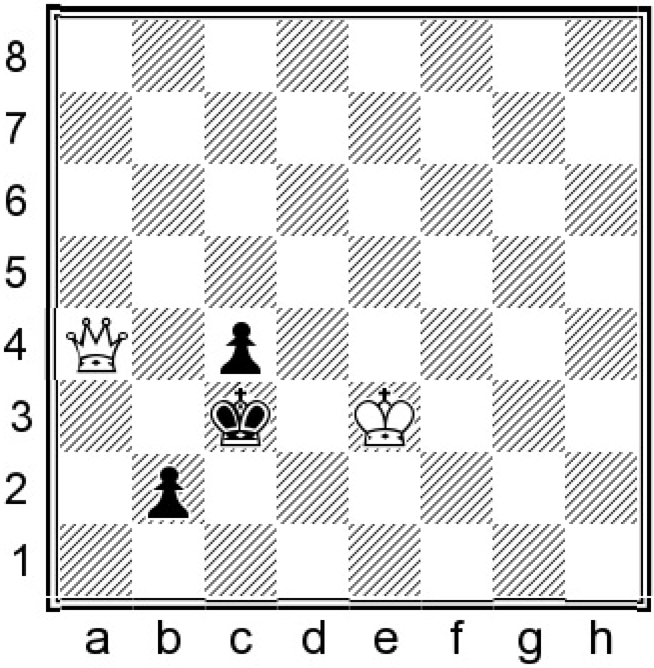
60.♔xe3!

60.♕xb2? would have been a serious mistake, due to 60...♖f3+!= with the *crazy rook* theme.

60...♔a3 61.♕b5!

Staying alert right to the end. Not 61.♔d2? a4!, when it is impossible to prevent the stalemate that will ensue after ...b1=♕.

61...a4 62.♕xc5+ ♔b3 63.♕b4+ ♔c2 64.♕xa4+ ♔xc3



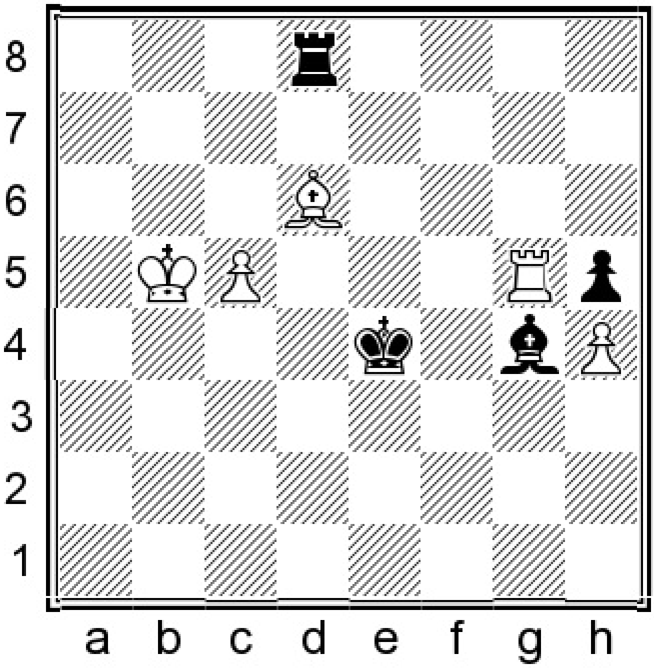
65.♕a5+

Again, 65.♕b5?? allows 65...b1=♕ 66.♕xb1 stalemate.

65...♔c2 66.♕f5+ ♔c1 67.♕f1+

And White won.

Juan Rivas Maceda 2349
Mauricio Rebord 2465
cr 2012



White to move

In a promising position, White initiates a combination resulting in the promotion of the pawn, but not an automatic win:

97.c6!?

97.♔b6 was a serious alternative, but it lies outside our current theme.

97.c6!? ♖xd6 98.♖xg4+ hxg4 99.c7 ♖h6!

The pawn was going to queen in any event, as demonstrated by the variation 99...♖d5+? 100.♔b4 ♖d4+ 101.♔b3 ♖d3+ 102.♔c2+–. So Black tries to transpose to a fortress position with rook and pawn vs queen, but he does not grasp the finer points.

100.c8=♕ ♖xh4 101.♕c4+ ♔f3?

In a modern game played by email, one might have expected perfect handling of any theoretical endings that arise, but that is not the case here. In this fortress position the king must stay behind the pawn and the correct move is 101...♔f5!, as can be verified by consulting the Nalimov tablebases. Now White gives Black no choice:

102.♔c5 ♖h2 103.♕d3+ ♔g2 104.♔d4 g3 105.♔e3 ♔h3 106.♕f5+ ♔h4 107.♕e4+ ♔h3 108.♔f4 ♖d2 109.♔g5 ♖b2 110.♕h1+ ♖h2 111.♕f1+ ♖g2 112.♕f5+ ♔h2 113.♔g4 ♖d2 114.♕f4 ♖d3 115.♕e5 ♔g1 116.♕e4

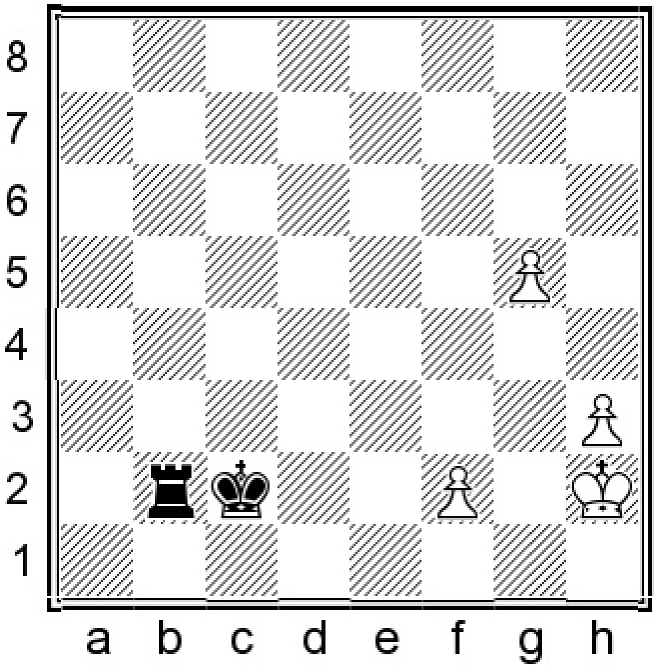
And here Black, who will lose either the pawn or the rook within a few moves, resigned.

Pattern 27 The battle of the kings

We began this chapter with a theme which is interesting because of its aesthetic effect. Now we are going to look at a theme which is important because it is so common.

The *battle of the kings* is, probably, the most important mechanism in these endings. For the side without a rook it consists of placing the king right in the path of the enemy king (the *bodycheck*, also known as *shouldering*) while for the side with the rook it consists of bringing the king gradually closer, helped by checks by the rook which gradually corner the enemy king.

Mikel Ortega Lopez 1991
Borja Zamarbide 2152
Pamplona 2012 (7)



White to move

Black has just captured the opponent's rook on b2, and is preparing to approach the pawns with his king. White, before advancing his pawns, needs to take up a centralised position with his king. If he does not do that, he will lose.

60.♔g3!

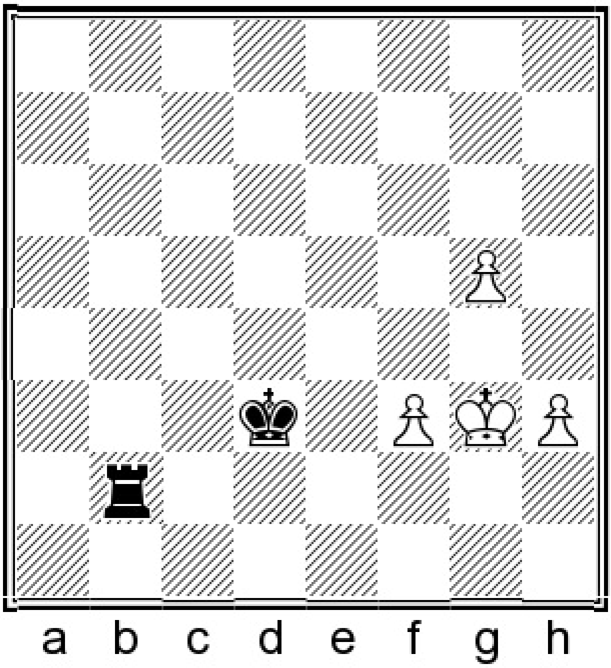
This first move is correct; just advancing the pawns on their own only makes sense when their promotion is unstoppable. Otherwise their advance just wastes tempi and they'll end up being captured.

If 60.g6? ♔d3!, although 60...♖b6 also wins; the safest method is to approach with the king: 61.h4 (61.g7 ♖b8 62.h4 ♔e4 63.h5 ♔f5 64.f4 ♔f6 65.h6 ♔g6–+) 61...♔e4 62.♔g3 ♔f5 63.h5 ♔g5 and the pawns fall.

60.♔g3! ♔d3 61.f3?

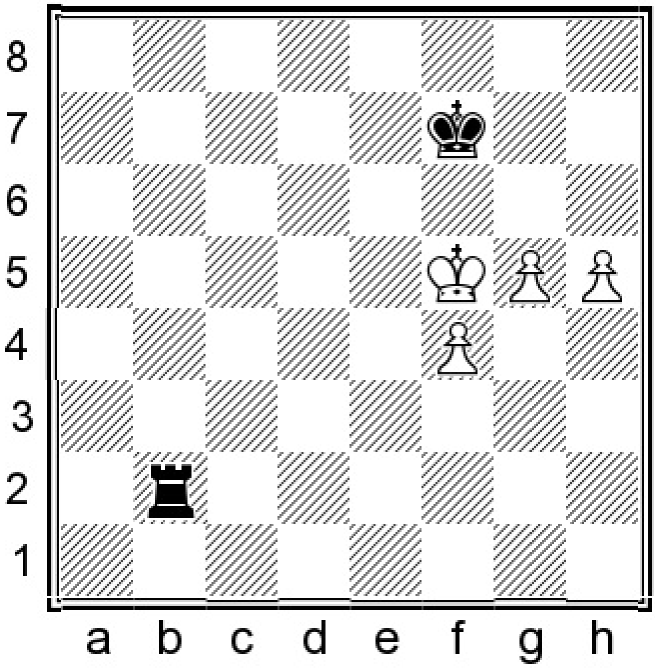
White tries to preserve all three pawns and cover the e4-square, but the lost tempo allows the black king to overtake its counterpart in the race towards the squares in front of the pawns.

61.♔f4! was the only correct move. There are two aspects to observe here: the first is that the king of the side with the pawns must choose a candidate and focus on supporting it without any hesitation; the second is that the defence of the other pawns is of secondary importance. 61...♔d4 (the king of the side with the rook tries to place the enemy king in opposition in order then to push it back down the board by checking with the rook; not 61...♖xf2+ 62.♔e5, when the king has taken up an ideal position to support the pawn on g5 and no longer needs the h3-pawn to achieve a draw) 62.♔f5! ♔d5 63.f4 ♔d6 64.♔f6=.



61...♔e3?

The same mistake, on the part of Black this time: the king approaches the pawns, but the rook is not ready to give check on g1, and now the king is straying from the path towards the top right-hand corner where all the pawns want to ‘land’. Instead, with 61...♔d4! the black king could have taken the lead in the race. There now follows a short dispute between the kings: 62.♔f4 ♔d5! 63.♔f5 ♔d6! but now the white king must concede the race and the black king enters the winning zone: 64.h4 (64.♔f6 ♖f2! – this is the key move; it is impossible for White to prevent the f-pawn from being captured with check, followed by the gradual confinement of the white king) 64...♔e7! and the black king deploys in front of the pawns, under conditions which are sufficient for victory: 65.h5 ♔f7 66.f4.



analysis diagram

Three connected passed pawns are normally enough to make a draw, as we shall see in **Pattern 29**, but they are unsuccessful when the rook is able to deploy behind them. Specifically, this position would be a draw with the white king on g3.

66...♖g2 67.h6 (67.♔e5 ♖h2!) 67...♖g1 (the side with the rook just has to make waiting moves with the rook from behind the pawns and then lodge his king between the pawns) 68.♔e5 ♔g6 – mission accomplished. Now the pawns are paralysed and will soon be captured: 69.♔e4 ♖f1 70.♔e3 ♔f5 and the pawns start to fall.

62.h4

This is sufficient to draw, although the most accurate in terms of technique would be 62.♔g4!=.

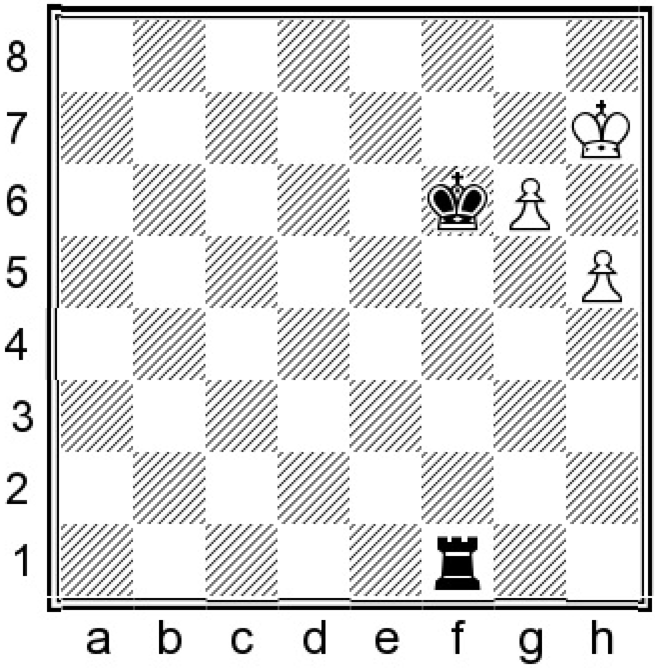
62...♖f2 63.g6 ♖xf3+ 64.♔g4

We can see that Black's king has been left behind and now the most he will be able to achieve is a draw.

64...♔e4 65.h5?

A serious but typical miscalculation. White continues to believe in advancing his pawns together. The correct idea (as we'll see in the next pattern) is for the king to support the 'best' pawn, in this case the g-pawn: 65.g7 ♖f1 66.♔g5 ♔e5 67.♔g6=.

65...♖f1 66.♔g5 ♔e5 67.♔h6 ♔f6 68.♔h7



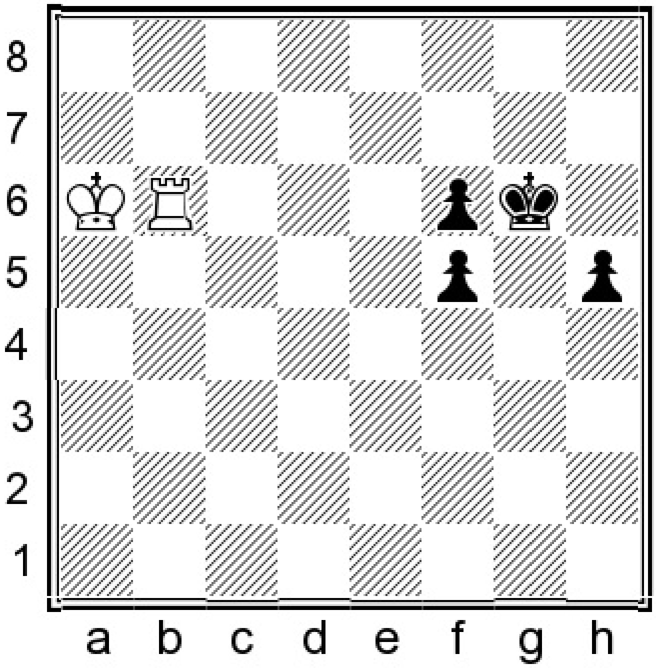
68...♖h1?

Black had his last chance to win with 68...♖g1! 69.♔g8 ♖g5 70.♔f8 ♖a5.

69.h6 ♖g1 70.g7 ♔f7 71.♔h8 ♖g6 72.h7 ½-½

With separated pawns, it is very difficult for the side with the pawns to win, but with the stronger side's king a long way away it is very reasonable to hope for a draw, and it is usually a question of choosing the right pawn to support.

Valerij Filippov 2584
Michal Krasenkow 2661
Shanghai 2000 (1)



Black to move

46...f4!

It is of the utmost importance for Black to bring out his king as soon as possible to block the route of the enemy monarch. 46...♔g5? would lose, due to the sudden arrival of the white king, as we shall analyse. However, it is worth mentioning an interesting thought here: the same position would be a draw if we removed the two f-pawns from the board. This paradox is confirmation for us that the pawns which are not chosen as ‘candidates’ are practically worthless in these endings: 47.♔b5 h4 48.♔c4 h3 49.♖b8 ♔g4 50.♔d3 h2 51.♖h8 ♔g3 52.♔e2! ♔g2 53.♖g8+ and now the f-pawns bring about Black’s defeat, because they prevent any stalemate ideas: 53...♔h3 54.♔f2, and it is well known that a knight newly promoted in the corner loses quickly; the two pawns do not change the result, although they require White to play quite precisely: 54...h1=♘+ 55.♔f3 ♔h2 56.♖g2+ ♔h3 57.♖g6 ♔h2 58.♖xf6 ♔g1 59.♖xf5 ♘f2 60.♖d5 ♘h3 61.♖b5 ♔h2 62.♖h5+–.

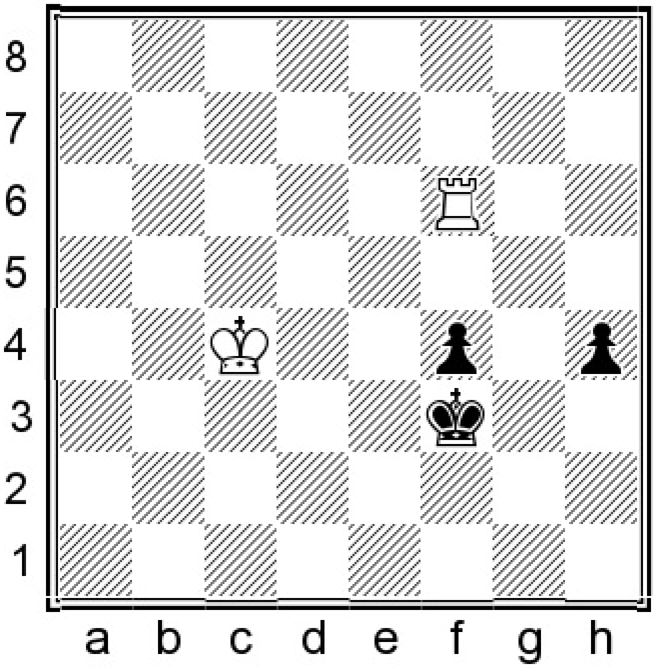
46...f4! 47.♔b5 ♔f5! 48.♔c4 ♔e4!

Black’s king has arrived in time to bar the way to his opponent. It will also be evident that although White’s king is opposite Black’s and his rook is ready to give check, the presence of the pawn on f6 will force the rook to lose a tempo capturing it, allowing the black king to escape from the pressure. It is an interesting, useful, and simple exercise to check that without the pawn on f6, or with the rook on the eighth rank, White would win.

48...♔g4? 49.♖xf6 h4 50.♔d3 ♔f3 51.♖h6 ♔g3 52.♔e2 and the king has reached the zone: 52...h3 53.♔f1 h2 54.♖h7. Now White just needs to wait and the pawns will fall.

49.♔c3

White has a very logical alternative, one which will help us review some ideas: 49.♖e6+ ♔f3 50.♖xf6 (50.♔d3 h4 transposes) and we arrive at a key point, where Black must bank on the h-pawn: 50...h4



analysis diagram

51.♖h6 (51.♔d3 h3 52.♖h6 ♔g2 53.♔e2 h2 54.♖g6+ ♔h1 and White has no time to create the mating net, e.g. 55.♔f2 f3=). This allows Black to choose which candidate to support: 51...♔e3! (it is instructive to verify that hedging his bets with 51...♔g3? would lose to 52.♔d3 h3 53.♔e2! h2 54.♔f1+–; but 51...h3! also draws) 52.♖xh4 f3=.

49...♔e3! 50.♖e6+

50.♔c2 f3 51.♖e6+ ♔f2 52.♔d2 and now it is necessary for Black to support the h-pawn: 52...h4! 53.♖xf6 h3 54.♖h6 ♔g2=.

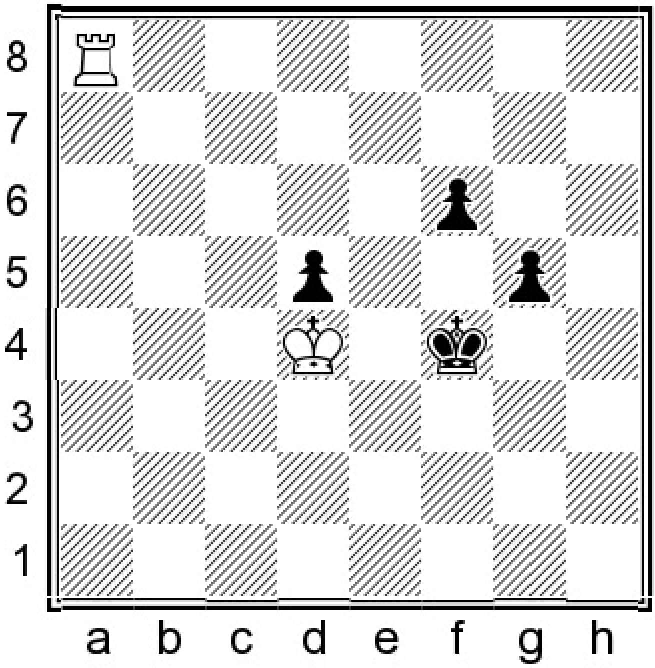
50...♔f2 51.♔d3 h4 52.♖e2+ ♔f3

Not 52...♔g1? 53.♔e4+–.

53.♔d2

A draw was agreed here. A possible continuation was 53...h3 54.♔e1 ♔g3 (forcing the rook to take up a different position) 55.♖e8 h2 56.♖g8+ ♔f3! 57.♖h8 ♔g2 58.♖g8+ ♔f3!.

Agustin Parrilla Salinas
Miguel Angel Ballesteros Jimenez
Madrid 2007 (5)



White to move

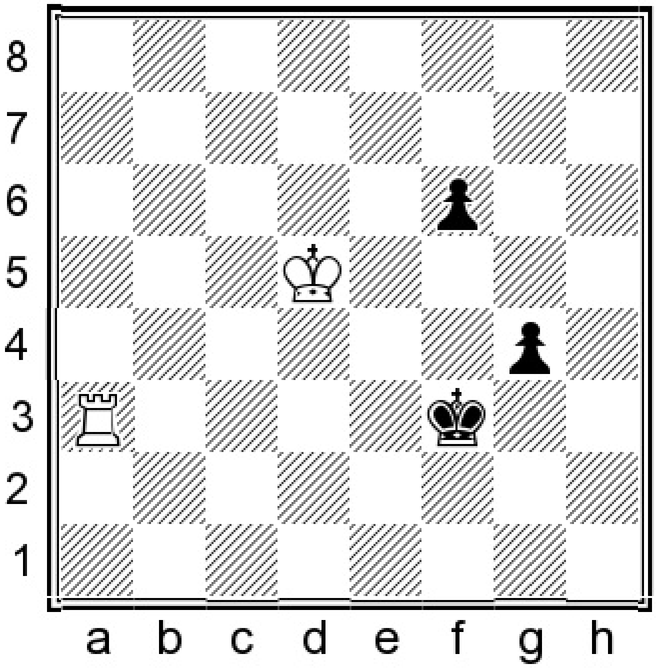
Here we can see a very clear mistake, but one which is frequently made, due to the materialism to which we all grow accustomed.

54.♔xd5?

White's king abandons the battle with its black counterpart and this is enough to enable Black to achieve a draw by supporting the candidate pawn.

54.♔d3! was the right way to play, although several rook moves also win: 54...♔f3 (54...g4 55.♔e2 allows the white king to deploy in front of the pawns, after which the win is trivial) 55.♖f8 (now a check on the f-file is unavoidable, allowing the white king to approach) 55...g4 56.♖xf6+ ♔g2 57.♔e2 g3 58.♖d6. Now there is time to capture the pawn – White wins.

54.♔xd5? g4 55.♖a4+ ♔f3 56.♖a3+



56...♔g2?

A mistake, very probably caused by ignorance of the pattern.

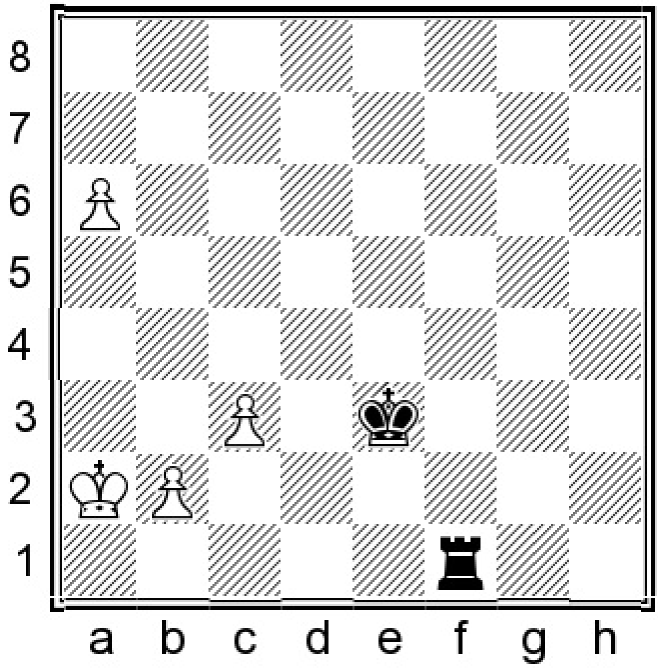
Instead, 56...♔f4!, hindering the progress of the white king, draws easily: 57.♔d4 g3 or 58.♔d3 (58.♖a1 g2=) 58...♔f3 59.♔d2+ ♔f2=.

57.♔e4

The king comes, sees and conquers.

57...♔h2 58.♔f4 f5 59.♖g3 1-0

Mihail Kobalia 2632
Mikhail Mozharov 2573
Moscow Blitz 2015 (7)



White to move

There were also many mistakes in this game between grandmasters, although at a blitz rate of play.

61.a7?

Natural, but 61.♔b3! drew by using the theme of *the battle of the kings*;

61.b4! also draws, based on the *three pawns vs rook* theme: 61...♔e4 62.b5 ♔d5 63.c4+ ♔c5 64.♔b2!, with a draw, as we will see in **Pattern 29**.

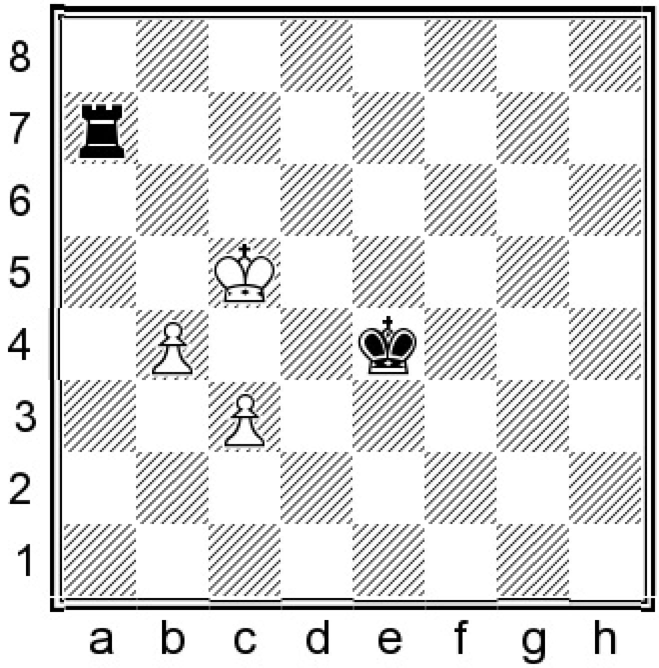
61.a7? ♖f8 62.♔b3 ♔e4 63.♔c4 ♖a8!

It is essential to eliminate the dangerous pawn before the king can support it.

64.b4

Other moves transpose, e.g. 64.♔c5 ♖xa7 65.b4 and now 65...♔e5!.

64...♖xa7 65.♔c5



65...♖c7+?

Once again, the mistake is a natural move. It was essential to place the kings in opposition before giving check; the tempo thus granted to White does not allow him to achieve anything positive: 65...♔e5! 66.♔b6 (66.c4 ♖c7+–+) 66...♖a3 67.c4 ♔d6 68.c5+ ♔d7 69.♔b7 ♖b3 70.c6+ ♔d6, followed by ...♖b4 with check.

66.♔d6!

The king continues the battle and ensures White’s salvation.

66...♖xc3 67.b5 ♖h3

After 67...♖b3 68.♔c6 ♔e5 69.b6 ♔e6 we arrive at the critical position, which is a draw with the side with the pawn to move. See *100 Endings You Must Know*, **Ending 28**.

68.b6 ♖h6+ 69.♔c7 ♔d5 70.b7 ♖h7+ 71.♔b6

White can even prevent the stress of having to promote to a knight in the variation 71.♔c8?! ♔c6.

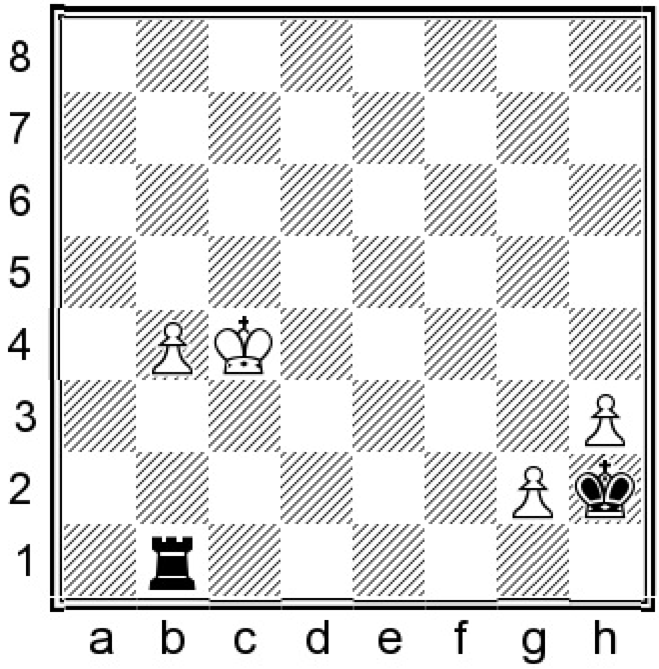
71...♖h8 72.♔c7

With a draw.

Pattern 28 For and against the candidate pawn

This theme is strongly related to the previous one, but I think it deserves a separate section. There are many situations where the side with the pawns selects one of them to support in their plan to make a queen and as a result all the efforts of the side with the rook are concentrated against that pawn.

Analysis



Black to move

In this composed position, the black king is hiding among the white pawns, but must ignore them completely. The only dangerous pawn is *the candidate* on b4 and all Black’s efforts must be devoted towards it:

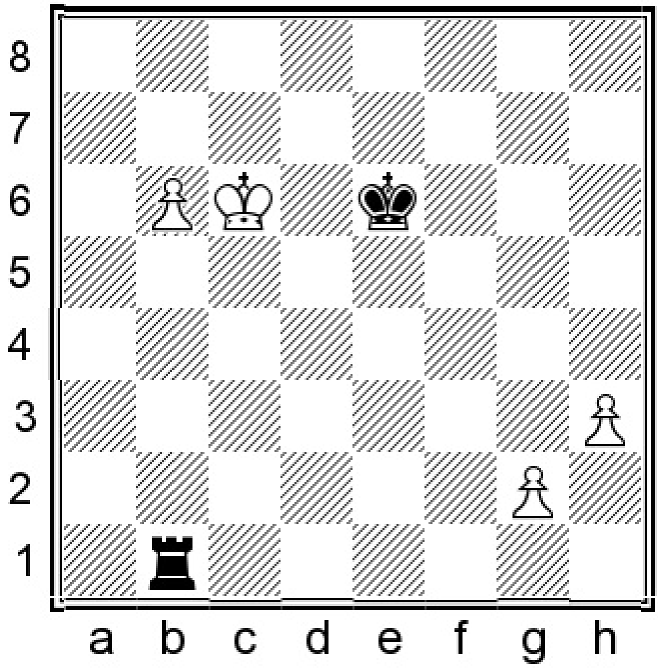
1...♔g3!!

1...♔xg2? loses a decisive tempo: 2.b5 ♔f3 3.♔c5 ♔e4 4.b6 ♔e5 5.♔c6 ♔e6 – Black reaches the famous extreme position which is known to theory without the pawn on h3 with White to move and is a draw. The h3-pawn is unimportant and the result is the same: 6.b7=.

1...♔g3!! 2.b5

After 2.h4 Black can even capture the pawn, but best in terms of technique would be 2...♔f4! 3.g3 ♔e5 and the king arrives in time to stop the candidate.

2...♔f4 3.♔c5 ♔e5 4.♔c6 ♔e6 5.b6



And now Black reaches the theoretical extreme position with him to move, which is a win. In this case the two kingside pawns are completely irrelevant.

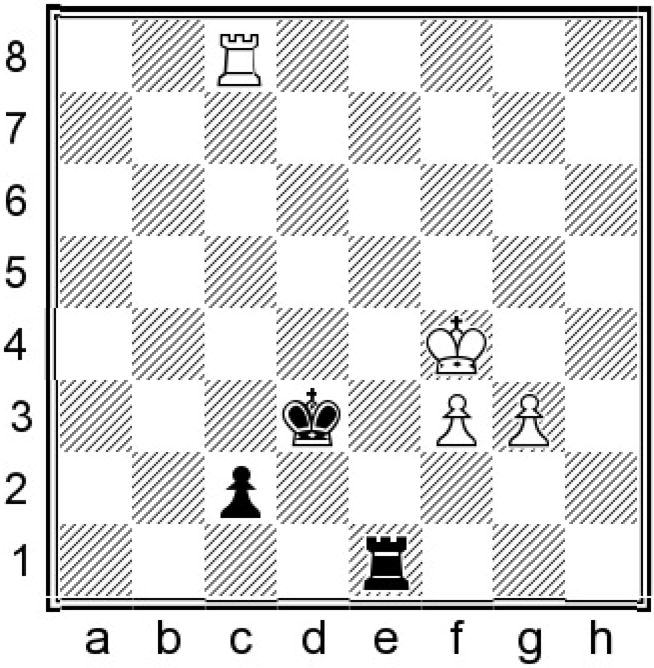
5...♖c1+ 6.♔b7 ♔d7 7.g4 ♖h1

Now there is time to capture the pawns.

8.♔a7 ♖xh3 9.b7 ♖a3+ 10.♔b8 ♖b3

And Black wins.

Samir Hajdarevic
Esref Korjenic 2041
Gorazde 2008 (1)



White to move

The white rook will be lost first, but White's king is supporting his pawns. We encounter this situation every evening at the club. There should be no excuse for playing it badly.

48.♖d8+?

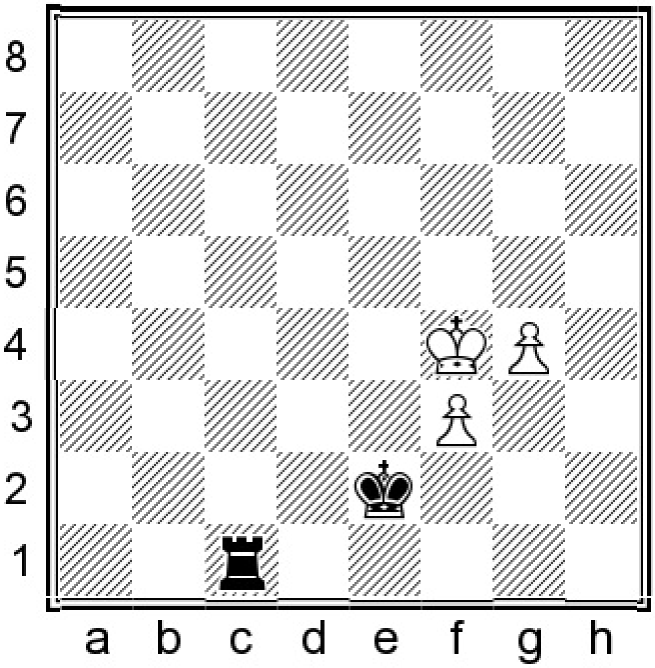
White's idea must have been to worsen the position of Black's king, but in reality it improves it, because the candidate pawn is the g-pawn and the black king can reach it more easily by outflanking the white king. It is worth considering that if White just had a pawn on g4 he would have played 48.♖xc2, then supported his only pawn and achieved a draw.

48.♖xc2 forces the black king one square further away.

48.g4 saves a tempo and also draws:

48.♖xc2 ♔xc2 49.g4 ♔d3 50.g5 ♔d4 51.g6 ♔d5 52.♔f5 ♔d6 53.g7 ♖g1 54.♔f6=.

48.♖d8+? ♚e2 49.♖c8 c1=♕+ 50.♖xc1 ♖xc1 51.g4



This is the key moment. White has chosen as his candidate pawn the one on g4. The other pawn is of no importance. The g-pawn is therefore the one that must be stopped. For this the black king has to take a stroll up the h-file.

51...♖c4+?

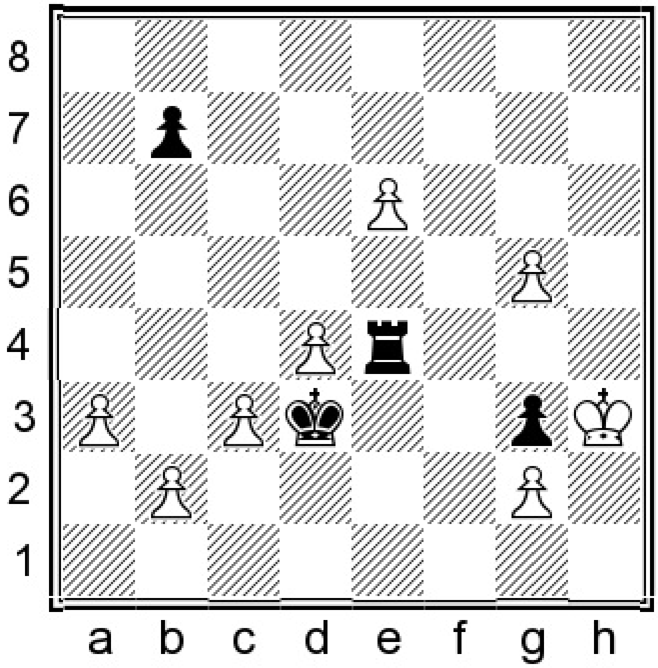
This helps the white king to support the candidate. Perhaps he was relying on winning with rook against knight. Correct was 51...♔f2! 52.g5 ♖g1 53.♔f5 ♔g3! (there is no time to capture the pawn on f3) 54.g6 ♔h4 55.♔f6 ♔h5 56.g7 ♔h6–+.

52.♔f5 ♔xf3 53.g5 ♖c5+ 54.♔f6 ♔g4 55.g6 ♖c6+ 56.♔f7 ♔f5 57.g7 ♖c7+ 58.♔f8 ♔f6 59.g8=♘+

The position is a draw, although Black tried to win for a further 33 moves.

The following example is really original and deserves to be known.

Emanuel Miciak 2379
Ruslan Tleptsok 2406
cr 2013

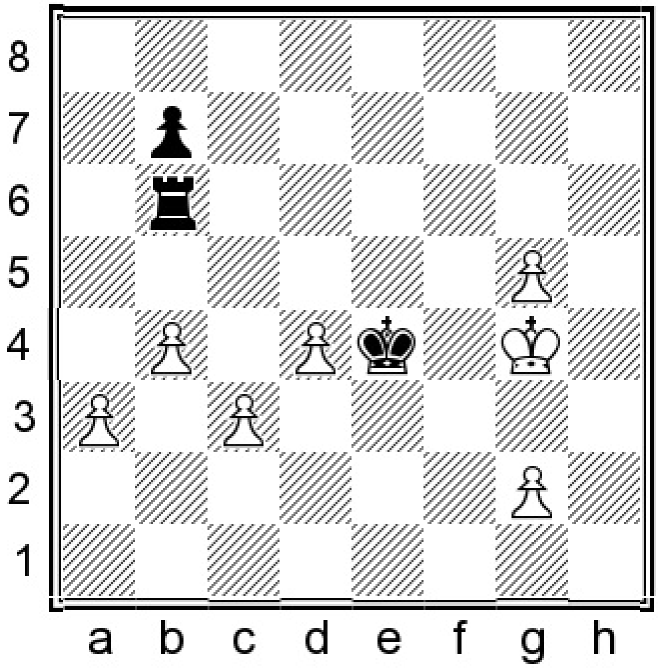


Black to move

The rook can capture many pawns, but all the energy of the two black pieces should be devoted to stopping the candidate pawn, which right now is the one on g5.

67...♔c4!!

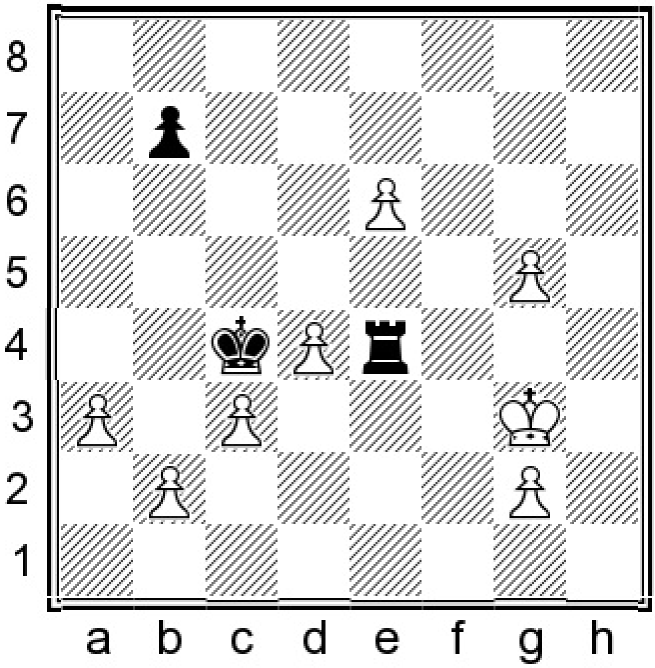
A fascinating move. The black king is coming, while the rook keeps the white king cut off. Instead, 67...♖xe6 also wins; however, at the right moment Black has to make a manoeuvre similar to the one in the game, but perhaps more difficult to analyse: 68.♔xg3 ♔e4 69.♔g4 ♖b6 70.b4



analysis diagram

70...♔d5! (again involving the king in the struggle against the candidate; 70...♖c6 leads to a race which allows White to save himself: 71.b5 ♖xc3 72.g6 ♖xa3 73.g7 ♖a8 74.♔g5 ♔xd4 75.♔f6 ♔c4 76.♔f7 ♔xb5 77.g8=♕ ♖xg8 78.♔xg8) 71.♔f5 ♖c6 72.g6 ♖xc3 73.g4 ♖f3+ (the key check, so that the king can approach) 74.♔g5 ♔e6–+.

67...♔c4!! 68.♔xg3



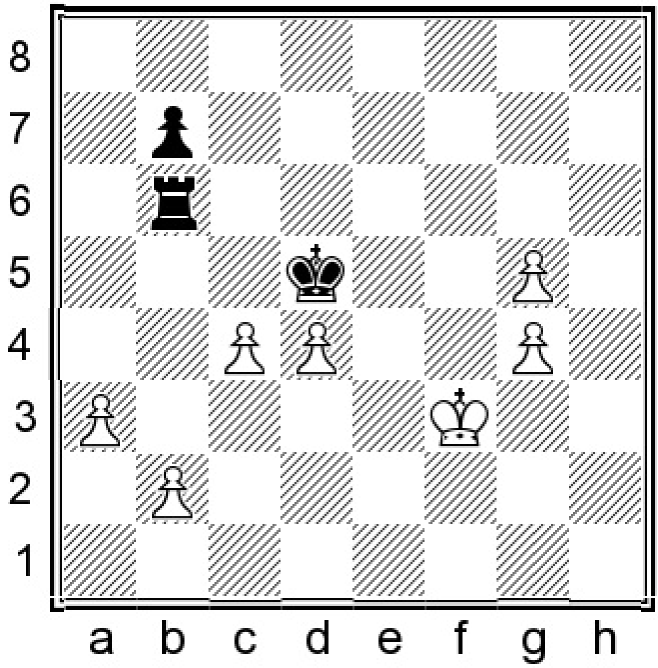
68...♔d5!

68...♖xe6? allows the king to support the candidate and draw: 69.♔f4 ♔d5 70.♔f5 ♖e2 71.g6 ♖f2+ 72.♔g5 ♔e6 73.d5+ ♔e7 74.g4 (keeping in reserve the d6-pawn and its comrades on the queenside; 74.d6+? is premature and fails by a whisker to 74...♔xd6! 75.g7 ♔e7! 76.g8=♘+ ♔e6–+. The knight is very badly placed and all the white pawns fall) 74...♔f8 (74...♖xb2 75.d6+ ♔f8 76.♔f6 – the king switches candidate, a theme we shall see more of later in the section) 75.c4 ♖xb2 76.♔f5! (the king prepares to support its other pawns; 76.♔f6? ♖b6+!) 76...♖c2 77.♔f6 ♖xc4 78.g7+ ♔g8 79.d6= and here too the king will support its new candidate.

69.♔f3 ♖xe6 70.g4

Preparing 71.♔f4. The immediate 70.♔f4 fails to 70...♖e2.

70...♖b6 71.c4+!?



A logical attempt to divert the king. 71.♔f4 ♖xb2 72.♔f5 ♖f2 73.♔g6 ♖f3 is a very simple winning line for Black.

71...♔xc4!

71...♔e6? heads towards the g-pawn, but allows the creation of a dangerous pawn mass with 72.b4 ♔f7 73.♔e4= and logically the white king now supports this.

72.♔e4 ♖b5!

Once again the cutting-off manoeuvre with the rook. Not 72...♖xb2? 73.g6=.

73.♔f4

In the event of 73.b3+ ♖xb3 74.g6 ♖xa3 the rook can reach the back rank, and now there is a black passed pawn on b7.

73...♔d5

White resigned.

Finally the black king arrives and White is unable to create any problems with the g-pawns.

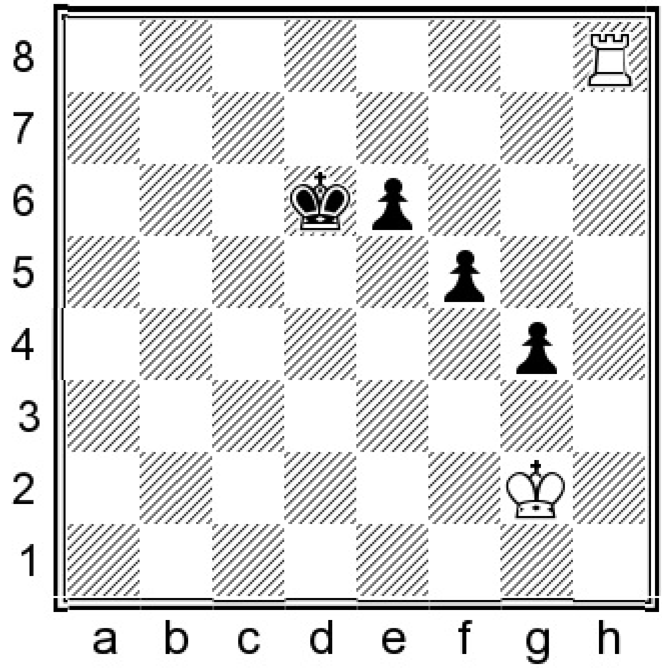
Pattern 29 Rook vs three connected pawns

The ending of rook against three connected pawns is quite common in practice. When the side with the rook has its king in front of the pawns, it usually wins, but if the pawns are sufficiently advanced they can force a draw, as we shall see in the first example.

The manoeuvres for winning purposes include distant vigilance by the rook, infiltration of the king amongst the pawns and, finally, zugzwang.

Since the position with the three pawns is very impressive, it is useful to analyse a number of examples in order to lose our fear of it.

Alexey Dreev 2495
Konstantin Lerner 2530
Simferopol ch-URS 1988



Black to move

In this first example, the pawns are well organised but they are not far enough advanced, so Black loses:

65...♔e5

It is logical for the black king to try to improve its position but (apart from the squares where it can capture the rook) in this position there is no square for Black's king which would allow him to draw.

Any advance of the pawns will result in the rapid loss of one of them, for example:

A) 65...f4 66.♖h4+–;

B) 65...e5 66.♔g3 ♔d5 67.♖a8 ♔d4 (67...♔e4 68.♖f8! with immediate zugzwang; or 67...♔e6 68.♖a6+ ♔d5 69.♖f6 ♔e4 70.♖f8, again with immediate zugzwang) 68.♖f8 ♔e4 69.♖f7, zugzwang.

65...♔e5 66.♔g3 ♔e4 67.♖h1 ♔e5 68.♖e1+ ♔f6 69.♔f4

The phase of infiltrating with the white king has reached its critical point. If it were White to move now, it would be best to waste a move with the rook.

69...♔f7 70.♖a1!

Bringing the rook to the sixth rank is one of the simplest procedures. The strategy of infiltration with 70.♔e5 also wins, but since after 70...♔g6 White cannot capture the pawn, it is not worth the trouble: if 71.♔xe6? ♔g5=.

70...♔f6 71.♖a6

The first zugzwang.

71...♔f7 72.♔e5

And now with the rook on the sixth rank, the king can take the decisive step forward.

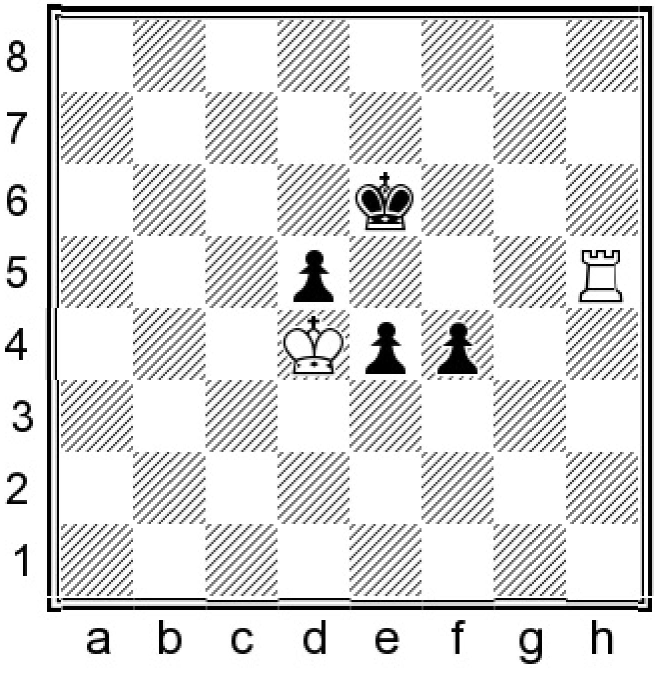
72...♔g6

72...g3 is a try. 73.♖a3! (73.♖xe6?? g2 74.♖f6+ ♔g7–+) 73...g2 74.♖g3 and the pawns soon fall.

73.♖xe6+ ♔g5 74.♖e8 1-0

With the pawns one rank further forward, the position is almost always a draw, because it is not possible to capture the rear pawn safely, either with the rook or with the king. This rule applies no matter which files the connected pawns are on.

Predrag Nikolic 2600
Mikhail Gurevich 2645
Moscow 1990 (4)



Black to move

72...f3!

White was threatening to capture the pawn on d5, but with this move the pawns reach the correct degree of advancement just in time and here we can verify that White cannot capture the pawn.

73.♖h8

73.♖xd5? is met with 73...f2–+;

73.♖e5+ ♔f6! and the d5-pawn cannot be captured with the king due to 74...f2.

The move in the game threatens ♖d8, soon capturing the d5-pawn due to zugzwang. This is an extreme situation; Black has three moves which draw and they are precisely the three moves of the king back to the second rank.

73...♔f7!

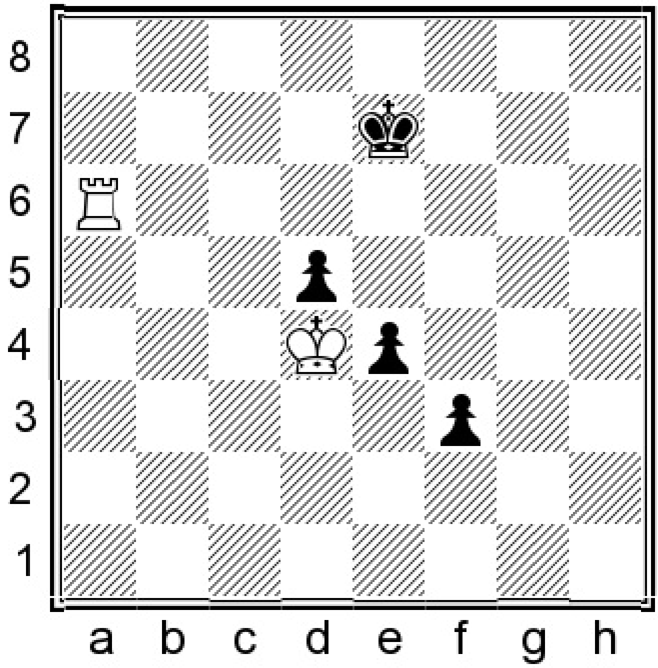
If the rook is allowed to reach e8 or d8 White always wins. It is essential to guard the back rank with the king, which is scarcely intuitive.

If 73...♔d6? then 74.♖e8! with zugzwang is the quickest way to win, e.g. 74...♔d7 75.♖e5 ♔c6 76.♖f5+–.

74.♖h6

Here 74.♖d8?? would be very bad in view of 74...f2! and Black wins.

74...♔e7 75.♖a6



Another delicate moment. Black has only one move to draw:

75...♔d7!

Black is limited to waiting with the king on the second rank until the white rook threatens the pawn and then moving the king to e6 or f6, but here it is important to choose the correct square.

75...♔f7? places the king on the file which allows the white king to advance to the fifth and prevent the advance of the g-pawn to the seventh rank, thanks to the check on f6. This is the only losing idea. 76.♔e5! and Black is unable to play 76...f2, but after 76...♔e7 77.♖e6+ ♔f7 78.♖f6+ ♔e7 79.♖f4 the pawns start to fall anyway.

76.♖b6

Or 76.♖a5 ♔e6! 77.♖b5 ♔f6=; we have seen this already. The pawn cannot be captured.

76...♔e7 77.♖b4 ♔e6 78.♖b8 ♔e7 79.♖c8 ♔d7 80.♖f8 ♔e7 81.♖b8

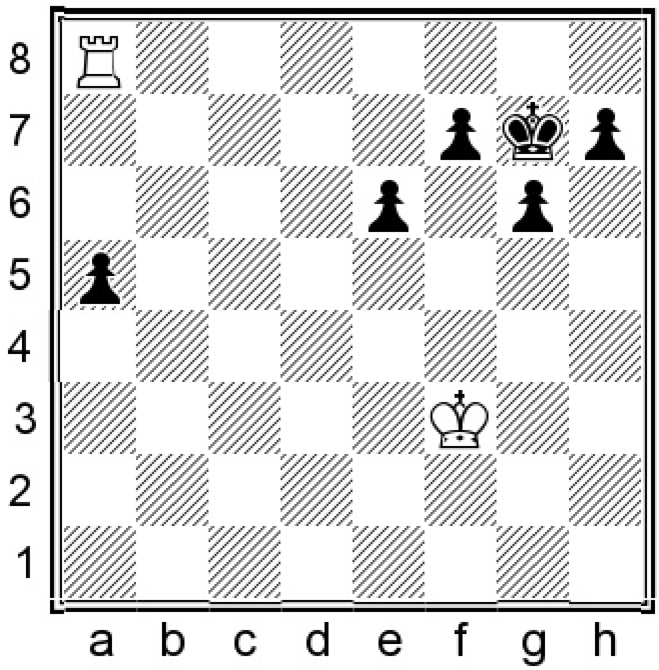
White could have tried 81.♖f5 ♔e6 82.♖f4 ♔d6 83.♖f6+ ♔e7 84.♔e5 – the most dangerous manoeuvre, because the only move to draw is 84...d4!=. Here White might even go wrong with 85.♖f4?? d3 and there is no way to stop the black pawns.

81...♔d7 82.♔e3 ½-½

With more pawns, there are greater drawing (and sometimes winning) chances, but if they are not very advanced the best strategy for the side with the pawns is to head for the structure that we now know well from the previous examples.

Evgeny Bareev 2734

Laurent Fressinet 2595
Enghien-les-Bains 2003 (6)



Black to move

52...g5?!

This does not lose but it is a slightly strange way to advance the pawns. Instead, 52...h5!? is the natural way and after 53.♖xa5 f5 54.♖a8 g5 we are going to reach the drawing structure of three pawns against the rook. The presence of a fourth pawn makes it more comfortable for Black but doesn't allow much hope of winning: 55.♖e8 ♔f7 56.♖h8 h4 57.♖h6 g4+ 58.♔f4 h3 59.♖h8 ♔g7 60.♖h4 ♔g6 61.♖h8=.

52...g5?! 53.♔g4 ♔h6!

Now this unnatural move is the only way to defend the pawn and prevent the advance of the white king: 53...♔g6 54.♖g8++–; 53...h6 54.♔h5!+–; 53...f6 54.♔h5!+–.

54.♖g8 f5+ 55.♔f3 e5 56.♖e8 e4+ 57.♔e3 ♔h5 58.♖e7 ♔g6 59.♖e6+

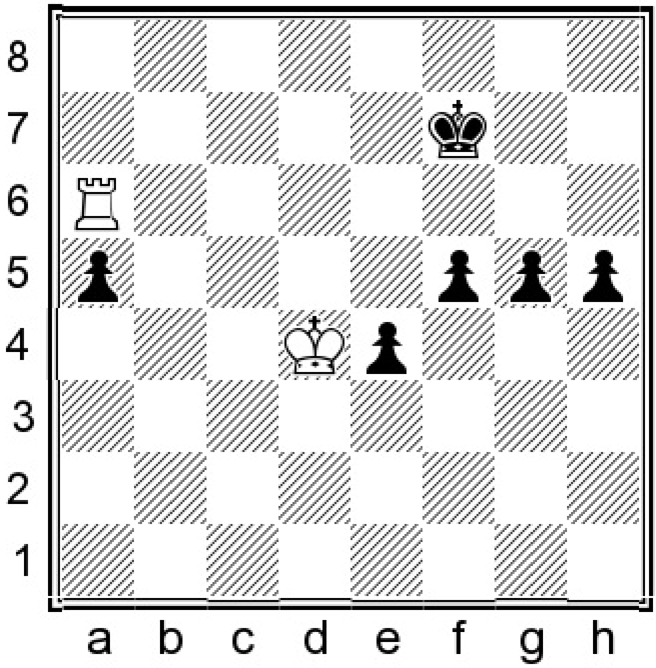
Black has four pawns but they aren't organised; he must still be careful.

59...♔f7!

59...♔h5? would begin to lose pawns: 60.♖f6 f4+ 61.♔xe4 ♔g4 (61...a4 62.♔f3 a3 63.♖a6+–) 62.♖h6 ♔g3 63.♖xh7 f3 64.♔e3 g4; in this variation there are only two pawns left on the kingside but they are quite dangerous. White must focus on the struggle against these and keep ignoring the a5-pawn:

65.♖c7! ♔g2 66.♖c2+ ♔g1 67.♖c4 and the dangerous pawns fall first, soon followed by the other one.

60.♖a6 h5 61.♔d4



61...h4?!

This does not lose, but allows a try which eventually results in a loss. It would have been easier, more natural and therefore correct to play 61...e3! 62.♖xa5 (62.♔xe3 makes it easier for Black: 62...h4 63.♔d4 h3 64.♔e5 g4 65.♔f4 ♔g7 66.♖xa5 ♔g6 67.♖a8 ♔g7=) 62...♔f6 63.♖a6+ ♔f7 64.♔xe3 h4 65.♔f3 h3 and the black pawns reach the drawing set-up.

62.♔e5!? e3?

Now it was necessary to resort to tactics and it is not easy to calculate well when there are passed pawns. 62...g4! was the right way to advance the pawns: 63.♔xf5 (63.♔f4 h3 64.♖xa5 ♔g6 would reach the drawing set-up but with an extra pawn on e4, which does not change the result) 63...g3 and White must take care from now on, although he can draw in various ways: 64.♖a7+ (64.♔xe4 g2 65.♖a7+ and Black must allow perpetual check, since allowing the rook to go to g7 would lose: 65...♔e8? 66.♖g7! h3 67.♔f3!+–) 64...♔f8 65.♔f6 ♔e8 66.♔e6 ♔d8 67.♔d6 ♔c8 68.♔c6 ♔b8? 69.♖b7+ ♔c8 (69...♔a8 70.♔b6 and the black king will be mated) 70.♖h7.

63.♔xf5!

Now the pawns cannot create enough problems and will fall one after another.

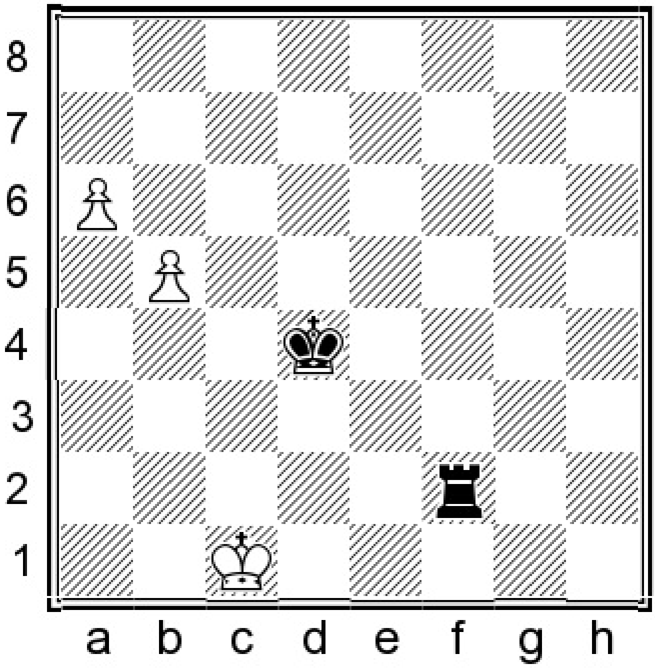
63...h3 64.♖a7+ ♔f8 65.♖xa5 1-0

Pattern 30 The king trapped on the edge

Sometimes the pawns are very dangerous, even winning on their own. But at other times their king not only fails to help them but gets trapped on the edge of the board and has to allow the opponent to escape, by means of a constant threat of mate, leading to a repetition of position. Occasionally the side with the rook can even force mate.

Let us begin with a classic example.

Paul Keres
Erich Eliskases
Noordwijk 1938 (4)



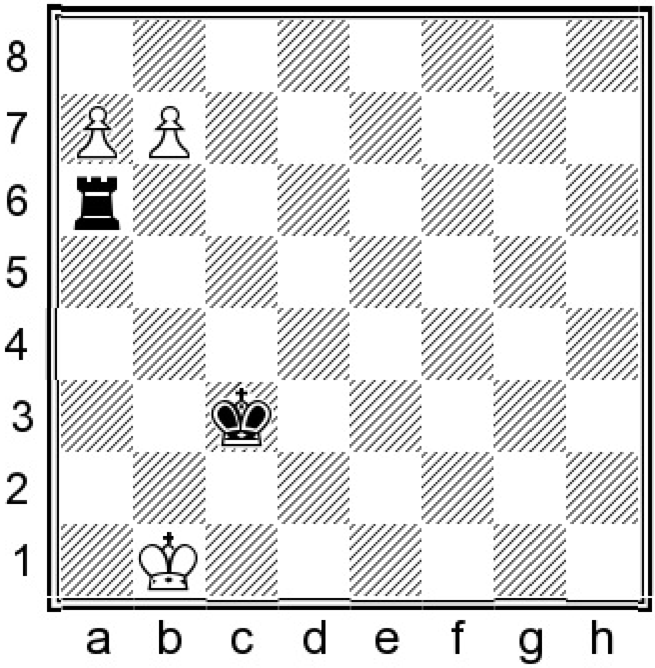
White to move

This is probably the most famous example on this theme. The pawns are so far advanced that they are immune to attack by the rook. But the white king is very badly placed. White even has two ways to keep advancing his pawns but neither achieves its objective:

53.a7

53.b6 ♔c3 leads to the same theme, although with some different variations: 54.♔d1 ♔d3 55.♔e1 ♔e3 56.b7 ♖h2 57.♔d1 (57.♔f1 ♔f3 58.♔g1 ♖h8 59.a7 ♖g8+ 60.♔f1 ♖h8=) 57...♔d3 58.♔c1 ♔c3 59.♔b1 ♖h1+ 60.♔a2 ♖h2+ 61.♔a3. Now the king traverses another section of the edge of the board, the a-file: 61...♖h1 62.♔a4 ♔c4 63.♔a5 ♔c5, and the king has to turn back.

53.a7 ♖a2 54.b6 ♔c3 55.♔b1 ♖a6 56.b7

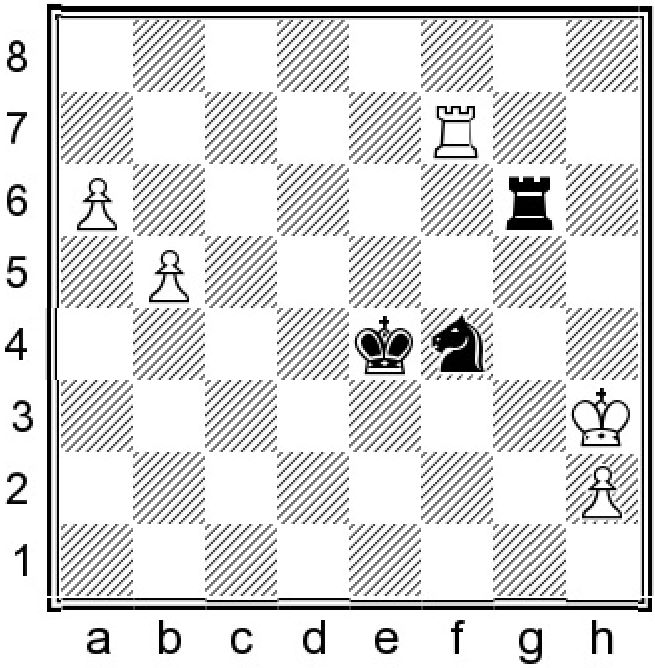


This is the position which made this game so famous. The two pawns have reached the seventh, but the rook has taken up its ideal position and the white king is unable to leave the edge of the board.

56...♖b6+ 57.♔c1 ♖h6!

The only square. The game was abandoned here as a draw. The continuation might have been: 58.♔d1 (or 58.♔b1 ♖b6+ 59.♔a2 ♖a6+) 58...♔d3 59.♔e1 ♔e3 60.♔f1 ♔f3 61.♔g1 ♖g6+ 62.♔h2 ♖h6+=.

Rafael Montero Melendez 2268
Mikel Huerga Leache 2370
Mondariz 2007 (2)



White to move

White made a logical attempt to win:

54.♖xf4+!

54.♔h4 ♔f3 55.h3 ♖h6+ 56.♔g5 ♖h5+ 57.♔f6 ♖xb5 58.a7 ♖a5 also leads to a draw.

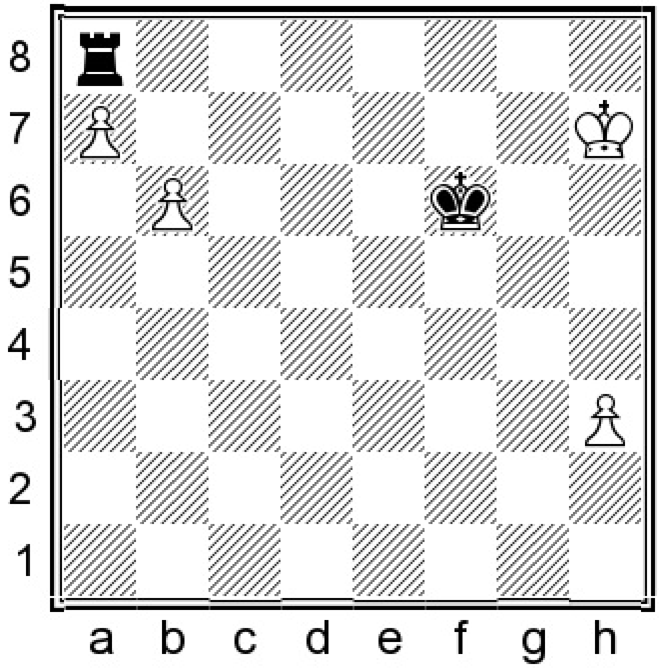
54.♖xf4+! ♔xf4 55.a7

The pawns are unstoppable, but by using mating threats Black prevents them from taking the final steps:

55...♖g8 56.b6 ♔f3 57.♔h4 ♔f4 58.♔h5 ♔f5 59.♔h6 ♔f6 60.♔h7 ♖a8

The only move, but in this case White is fortunate that he still has the h-pawn and can make a move with it.

61.h3



Now Black has to release the white king, but nevertheless White cannot win:

61...♔e6!

61...♔f5 also works: 62.♔g7 ♔e6 63.♔g6 ♖g8+ and the king has to go back to the edge: 64.♔h5 ♔f5=.

62.♔g6

The king moves off the seventh rank and thus White threatens to play 63.b7.

If 62.♔g7 ♔d6 and the queenside pawns fall, but the h-pawn still enables White to make a draw.

62...♖g8+

Now the white king has to go back to the edge.

63.♔h6

Or 63.♔h5 ♔f5 64.♔h6 ♔f6 65.♔h7 ♖a8 66.h4 ♔e6=.

63...♔f6 64.♔h7 ♖a8 65.h4

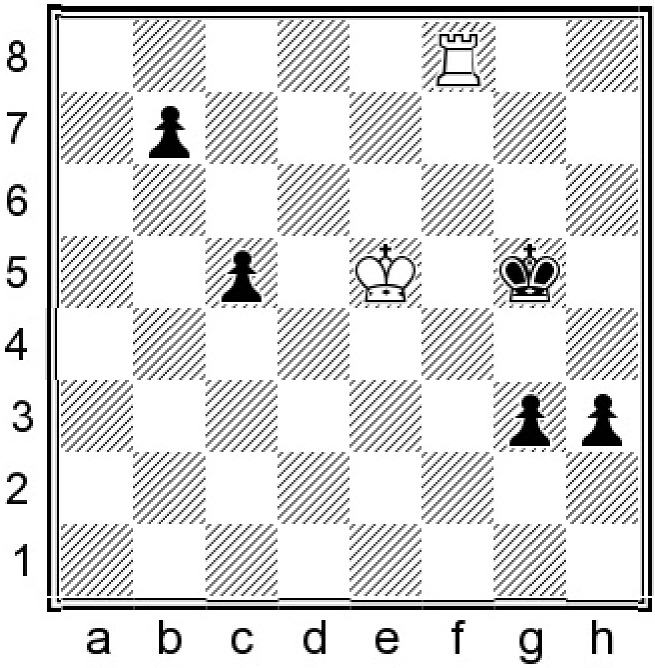
And the manoeuvre is repeated:

65...♔e6 66.♔g6 ♖g8+ 67.♔h6 ♔f6 68.♔h7 ♖a8 69.h5 ♔e6 70.♔g7

70.♔g6 ♖g8+ 71.♔h6 ♔f6 72.♔h7 ♖a8 73.h6 would require Black to employ a different defensive method: 73...♖d8 74.b7 ♖d7+ with perpetual check.

70...♔d6 71.h6 ♔c6 72.h7 ½-½

Ferenc Portisch
Peter Dely
Budapest 1953



Black to move

In this case, advancing the pawns imprecisely allowed a miraculous escape:

1...g2?

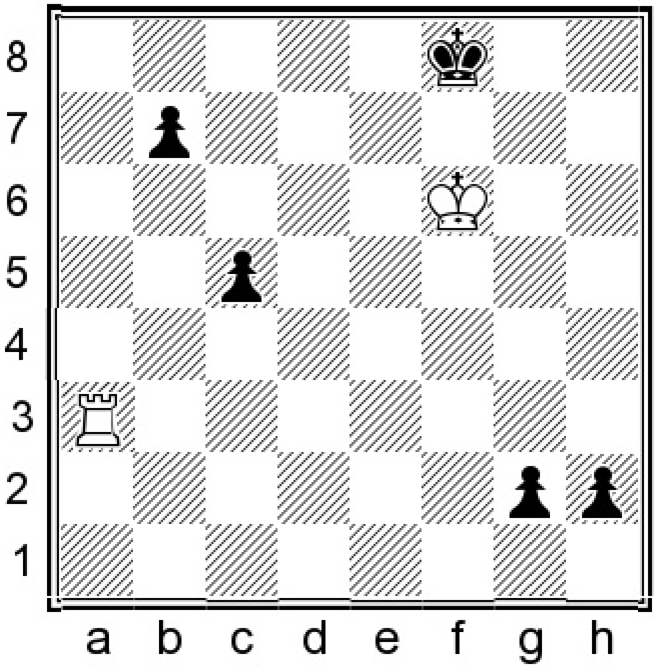
At first sight it might appear that this move provides the black king with more room, allowing it to slip away via g3, but in fact the king cannot move in that direction.

1...h2! was the winning move: 2.♖g8+ ♔h6 (the king moves backwards and the pawns win on their own) 3.♔f6 (3.♖h8+ ♔g7 4.♖h3 g2–+) 3...♔h7 4.♖g7+ ♔h8, and the h-pawn queens; this is the difference.

1...g2? 2.♖g8+ ♔h6 3.♔f6 ♔h7 4.♖g3

Now there is no time to queen the pawn and the white rook is able to threaten mate from the other edge:

4...h2 5.♖h3+ ♔g8 6.♖g3+ ♔f8 7.♖a3



With a draw, for example 7...♔e8 8.♔e6 ♔d8 9.♔d6 ♔e8 (not 9...♔c8?? 10.♖a8#) 10.♔e6 and all the manoeuvres are repeated.

Chapter 5

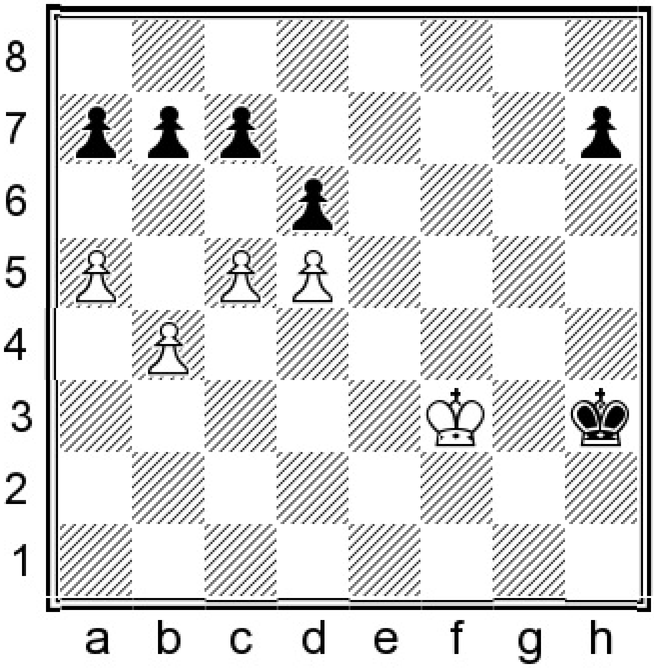
Queen vs pawns

In my experience as a trainer I have noticed that just as the majority of players overestimate the strength of passed pawns when they face a rook or a minor piece, that prejudice is turned on its head when the pawns face a queen. The queen seems able to win against any number of pawns and no matter how far they are advanced, and the truth of the matter is that this is almost always so, but it is not always the case. Of course, there are not many situations where humble pawns can face the all-powerful queen with optimism. Hence this chapter will be shorter than others, but it is worth being aware of the few exceptional situations that exist, not just for their aesthetic value but also to counter preconceived ideas.

Pattern 31 Obstacles to checks

The first circumstance that makes it difficult for the queen to win, even against a single pawn (which is almost always on the seventh but very occasionally on the sixth) is the presence of obstacles to the queen's typical manoeuvre of approaching with check.

Anatolij Bets 2417
Mikhail Golubev 2532
Alushta 1999 (1)

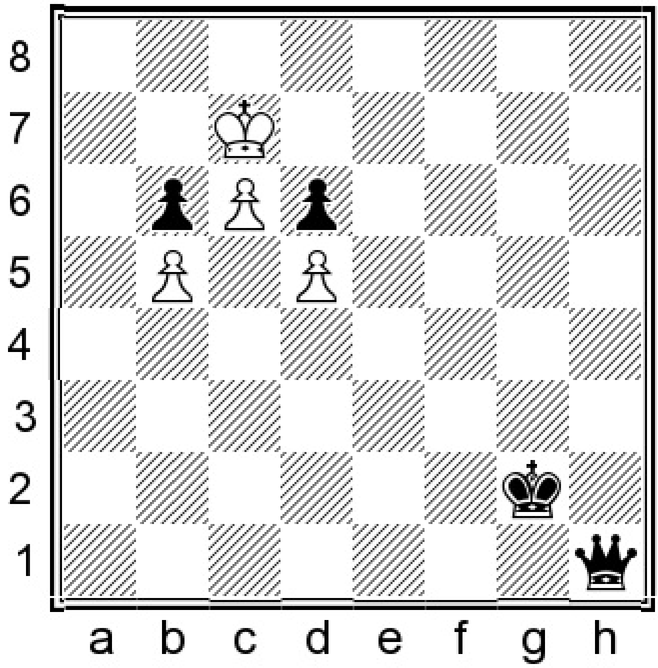


Black to move

We shall start from a pawn ending, where pawn promotion seems a long way off. In most cases where a queen is faced with a far-advanced pawn, the position is the result of a queening race in a pawn ending. It is very interesting to observe that Black miscalculated here, possibly due to overconfidence, the result of assuming that the queen will win against the pawn on d7 which arises on move 49.

40...b6?

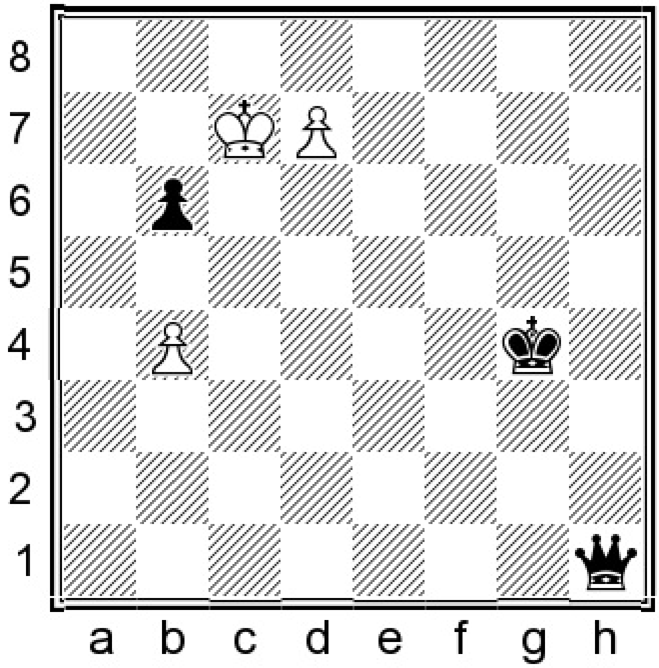
This simply loses a tempo; there was no need to prevent a breakthrough yet. It was necessary to advance the passed pawn instead with 40...h5!, when White can choose between two lines which also lead to a struggle between a queen and a dangerous pawn, but in both cases the queen triumphs: 41.b5!? (41.cxd6 cxd6 42.♔f4 h4 43.♔f5 ♚g3 44.♔e6 h3 45.♔xd6 h2 46.♔c7 h1=♛ and here the pawn is unable to create any problems) 41...b6! 42.axb6 axb6 43.c6 h4 44.♔f4 ♚g2 45.♔f5 h3 46.♔e6 h2 47.♔d7 h1=♛ 48.♔xc7.



analysis diagram

The c-pawn is only on the sixth rank, but Black still has a lot of work to do, because many checks are blocked and the white king can capture more pawns. However, the queen has a great ability to create zugzwang positions: 48...♛h7+! 49.♔xd6 (49.♔xb6 ♛f7! 50.c7 ♛d7!, with an effective zugzwang) 49...♛f7 50.c7 ♛e8, once again with a really beautiful unilateral zugzwang.

40...b6? 41.cxd6 cxd6 42.axb6 axb6 43.♔f4 h5 44.♔f5 h4 45.♔e6 ♚g4 46.♔xd6 h3 47.♔c7 h2 48.d6 h1=♛ 49.d7



The diagram position is a typical example of a draw. There are no stalemate ideas, but the queen cannot force the white king to move in front of the pawn, because the pawns on the b-file prevent any effective checks. The variations are long but simple:

49...♕c1+ 50.♔b7 ♕d2 51.♔c7 ♕f4+

Black soon opts for the alternative plan of letting the pawn queen and playing a queen ending with an extra pawn. But that transformation normally leads to a drawn ending.

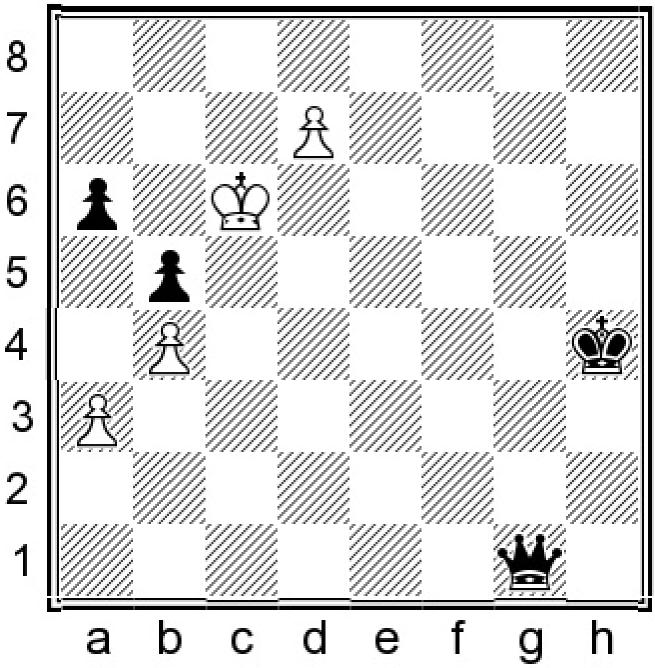
Instead, after 51...♕c3+ 52.♔b7 ♕d4 53.♔c7 ♕c4+ 54.♔b7 ♕d5+ 55.♔c7 the critical moment has arrived when 56...♕c5+ is not possible.

52.♔c8 ♕xb4 53.d8=♕ ♕c5+

And the game was drawn in 67 moves.

The second example will come as no surprise, because it is a variation on the same theme.

Benjamin Leussen
Wilhelm Schwan
Barmen 1905 (12)



Black to move

The queenside pawn structure in this game is quite common and also gives White good protection against the checks that Black needs in order to bring his queen closer:

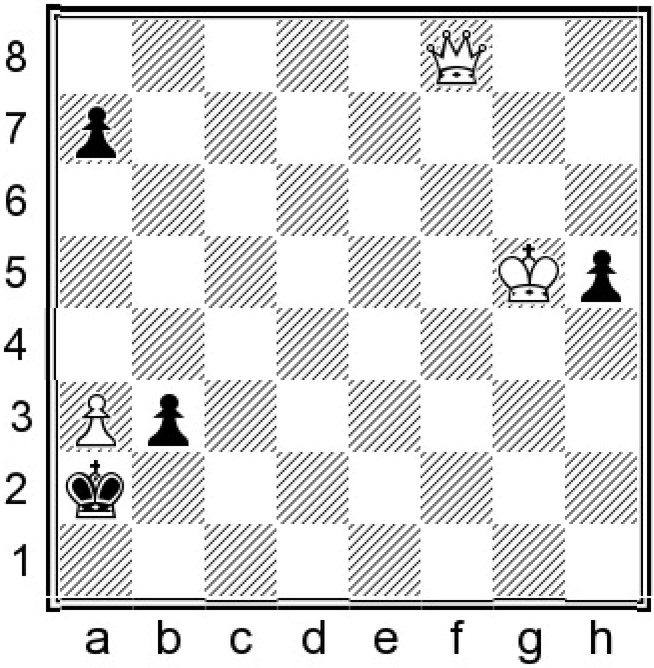
55...♕c1+ 56.♔b7 ♕d2 57.♔c7 ♕c3+ 58.♔b7 ♕d4 59.♔c8

And the queen is unable to give the check on c5 which it needs to then move to c6.

59...♕c4+ ½-½

A pawn on the sixth rank has greater difficulty to draw against a queen, but it is possible.

William Paschall 2280
Le Thi Phuong Lien 2265
Budapest 1997 (5)



White to move

In this case White allowed the pawn to advance to the seventh, seeing no way to make progress. White can win only by bringing the king closer.

50.♕f7!

With this move we diverge from the continuation of the game, which was 50.♔xh5? b2 51.♕f7+ ♔a1 52.♕f6 ♔a2 53.♕e6+ ♔a1 54.♕e5 ♔a2 55.♕d5+ ♔a1 56.♕d4 ♔a2 57.♕c4+ ♔a1 58.♕d4 ♔a2. Here White convinced himself that there is no way to bring the queen any closer and he decided to enter the queen ending, which ended in a draw: 59.♕xa7 b1=♕ 60.a4 ♕f5+ 61.♔h4 ♕f4+ 62.♔h3 ♔a3 63.a5 ♔a4 64.♕c5 ♕h6+ 65.♔g4 ♕a6 66.♕b6 ♕xa5 67.♕xa5+ ♔xa5 ½-½.

50.♕f7! a5 51.♔f4!

Not 51.♔xh5? a4 52.♔g4 ♔a1!=; White cannot prevent the advance of the b-pawn to the seventh rank, with the now familiar draw.

51...♔xa3

Or 51...a4 52.♔e3 ♔a1 53.♕f1+ ♔a2 54.♔d2 b2 55.♔c2+–.

52.♔e3 b2 53.♕b7!

Without the pawn on h5, Black could draw with 53...a4, threatening 54...b1=♕, with stalemate.

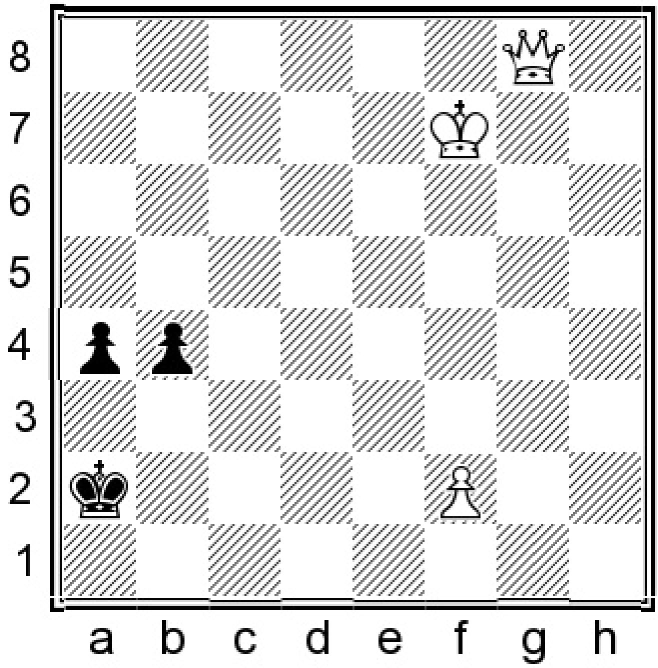
53...♔a2 54.♕d5+!

Now the a5-pawn falls and White wins.

Pattern 32 The struggle against a pawn mass

A more attractive situation, and one which can also put the queen’s victory at risk, happens when it confronts two or more passed pawns, connected and quite advanced, which we can call a ‘pawn mass’. The pawns are often the two at the edge of the board. The queen performs true wonders in such cases, and help from the king can arrive, even from far away, but even so it is not always a win.

Frederick Yates
Frank Marshall
Karlsbad 1929 (9)

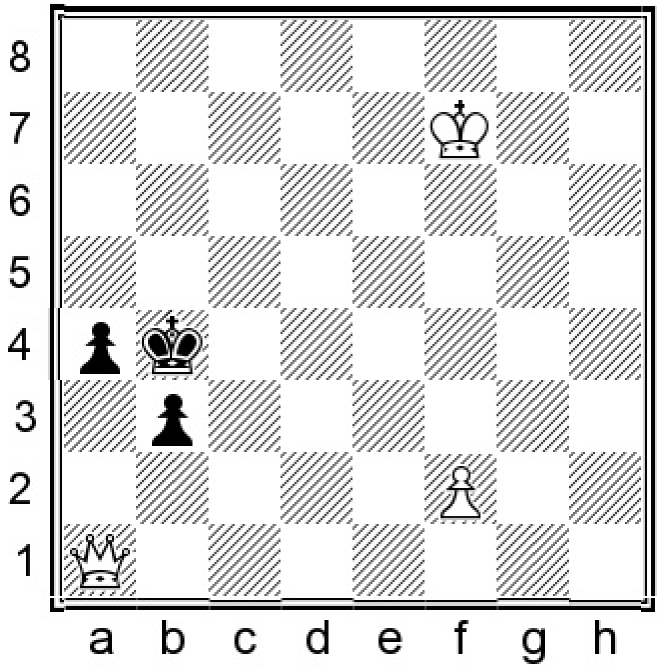


White to move

Our first example is a historic game in which White did not manage to defeat connected pawns on the fifth rank:

49.♔e6

An intelligent move, which speeds up the arrival of the king by means of discovered checks. Instead, 49.♕g4! was the most technically correct procedure, because it first forces the black king to retreat. After 49...♔a3 50.♕d4! the queen goes into the corner, where it stops the pawns very effectively. This manoeuvre is worth noting: 50...b3 51.♕a1+! (placing the queen in front of the pawns is usually a guarantee of success) 51...♔b4.



analysis diagram

It is worth observing that with the queen in this position, the two black pawns are unable to create any problems, no matter how far away the white king is, and even if the side with the queen has no pawns: 52.♔e6 a3 (the only way to advance the pawns) 53.♕d4+ ♔b5 54.♕c3 b2 55.♕b3++–.

49.♔e6 b3 50.♔d5 b2 51.♔d4+ ♔a3

Black sets a trap which is typical of these endings.

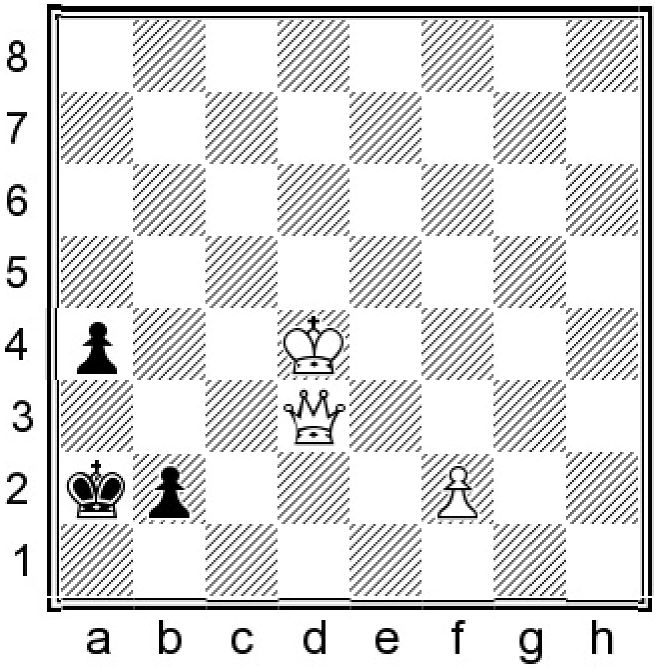
52.♕f8+!

52.♕b8? is the common blunder which leads to a typical stalemate after 52...b1=♕=.

52...♔b3 53.♕f3+ ♔a2 54.♕d5+ ♔a3 55.♕c5+ ♔a2 56.♕c4+ ♔a3 57.♕d3+

Not 57.♕b5? b1=♕=.

57...♔a2

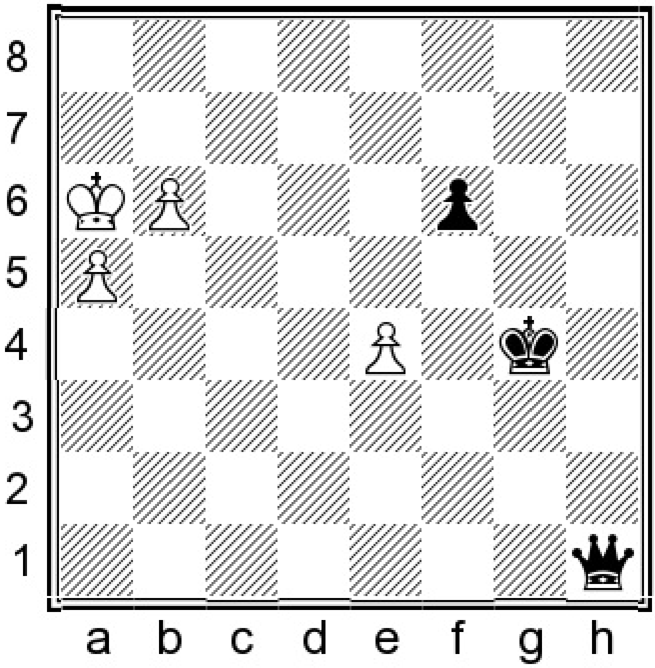


58.♔c4?

After a great effort to bring his queen closer, White miscalculates the pawn ending, forgetting the Réti manoeuvre. It was necessary to keep improving the position with 58.♕c2 ♔a3 and now White has several ways to win, but the simplest is once again to place the queen in front of the pawns, e.g. 59.♕b1 ♔b3 60.f4 a3 61.♔d3 a2 62.♕c2+ ♔a3 63.♕c3+, and the pawns fall.

58...b1=♕ 59.♕xb1+ ♔xb1 60.♔b4 ♔b2! 61.♔xa4 ♔c3 62.f4 ♔d4 ½-½

Gabriel Battaglini 2229
Alexander Raetsky 2423
Sautron 2002 (2)



White to move

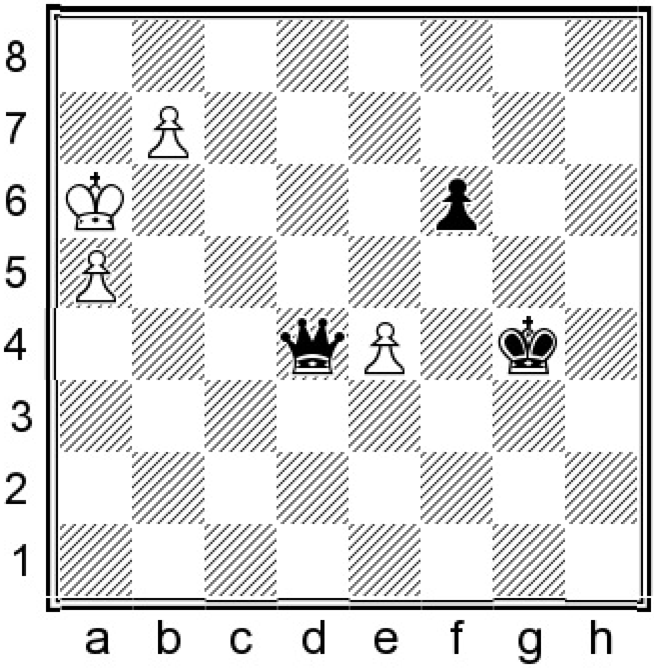
Again we have a battle between the queen and the two pawns at the edge of the board. Here we are going to encounter a total of four (!) typical mechanisms: the staircase manoeuvre, the blockade by means of simultaneous surveillance of pawns and squares, the stalemate by queening the knight’s pawn and the mate against two pawns on the seventh.

47.b7?

It is impossible to criticise such a natural move other than by means of calculation. Instead, by playing 47.♔a7!, preparing a5-a6, before playing b6-b7, White could have prevented the blockading manoeuvre and the resulting destruction of the pawns and thus achieved a draw: 47...♕g1 (47...♕xe4 48.b7 ♕d4+ 49.♔a6! ♕b4 and here it is interesting to observe the trick 50.b8=♕! ♕xb8 stalemate, as it is typical) 48.a6 ♕c5 49.♔b7 ♕e7+ 50.♔b8=. With the king now in front, White threatens to advance his pawns, limiting Black to giving perpetual check.

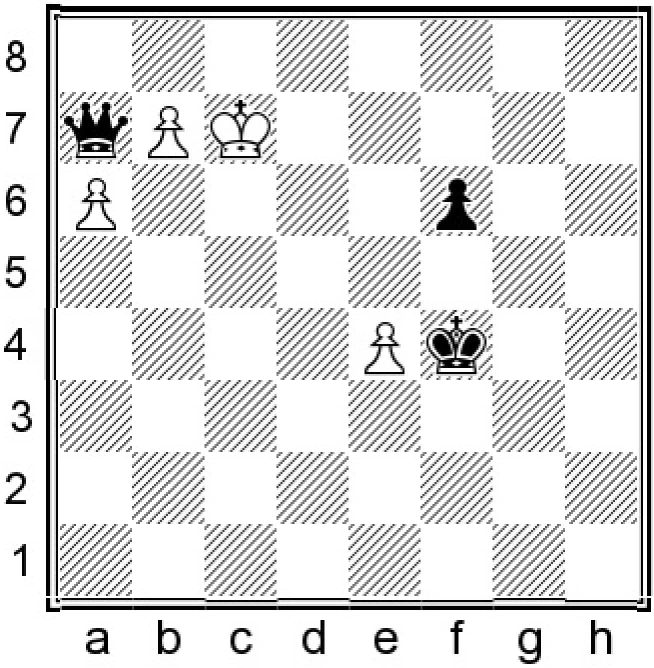
47.b7? ♕b1?

Black shows that he is unfamiliar with the stalemate pattern. Instead, he should have applied the *staircase manoeuvre* 47...♕f1+ 48.♔a7 ♕f2+, completing the first step, 49.♔a6 ♕e2+ 50.♔a7 ♕e3+, now the second, 51.♔a6 ♕d3+ 52.♔a7 ♕d4+ and finally the third, 53.♔a6.



analysis diagram

Now the queen can reach the key square e5, from where it prevents the promotion of the b-pawn and also attacks the a5-pawn: 53...♕e5!! (other moves win, but not without going via this square at some point) 54.♔b6 (54.♔a7 ♕xa5+–+) 54...♔f4 (Black has enough time to activate the king) 55.a6 ♕d4+ (in this case, stationing the queen in front of the pawn does not work: 55...♕b8? 56.a7 ♕d6+ 57.♔b5, leading to a position where Black can make no progress) 56.♔c7 ♕a7–+.

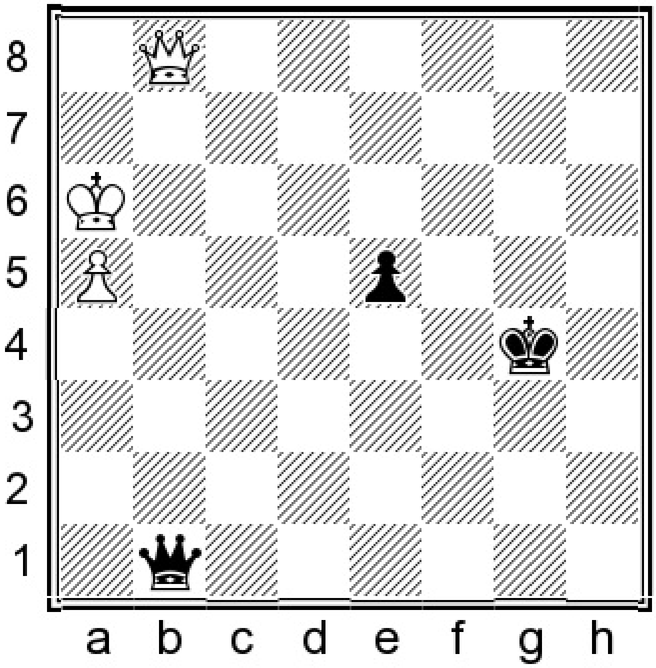


analysis diagram

Observe this ideal blockading position, because no matter how many tempi White had available he would still be unable to make any progress.

48.♔a7?

Black does not know the stalemate pattern either. 48.e5! f5 (48...fxe5 49.b8=♕!.



analysis diagram

This is the stalemate pattern which is always in the air in this pawn structure) 49.♔a7= ♕g1+ 50.♔a8 ♕g2 51.a6! (51.♔a7 ♕f2+ 52.♔a8 ♕f3 53.♔a7) 51...♕c6 52.a7. With both pawns on the seventh rank, the result is normally a draw, but it is still necessary to avoid a little trap: 52...f4 53.♔b8 ♕e8+ 54.♔c7 ♕xe5+ 55.♔c6! (55.♔c8?? might seem logical, but it diminishes the mobility of the king and leads to defeat: 55...♕f5+ 56.♔c7 ♕a5+!. This check is deadly, because it is not possible defend the pawn on a7, since if 57.♔b8 ♕d8#) 55...♕e6+ (55...♕f6+ 56.♔c7=) 56.♔c7=.

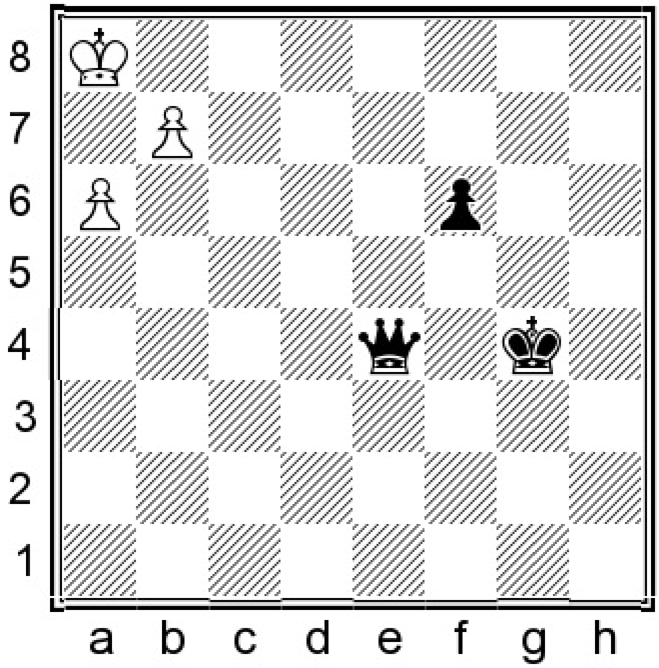
48...♕b4?

Black misses his last opportunity to execute the *staircase manoeuvre*, although the first step would be to move the queen away with 48...♕g1+!.

49.a6

White has achieved the drawing set-up, with the king in front of the pawns.

49...♕d4+ 50.♔a8 ♕xe4



51.♔a7

It is not superfluous to recall why placing both pawns on the seventh loses, since if you do not know the mating mechanism, you might feel safe: 51.a7 ♕d5! 52.♔b8 ♕d8#.

51...♕d4+ 52.♔a8 ♕c4 53.♔a7! ♕c7 54.♔a8 ♕b6 55.a7 ♕c6 56.♔b8 ♕d6+ 57.♔c8 ♕c5+ 58.♔b8! ♕e5+ 59.♔c8!

Not 59.♔a8? ♕d5! – once again this forces mate.

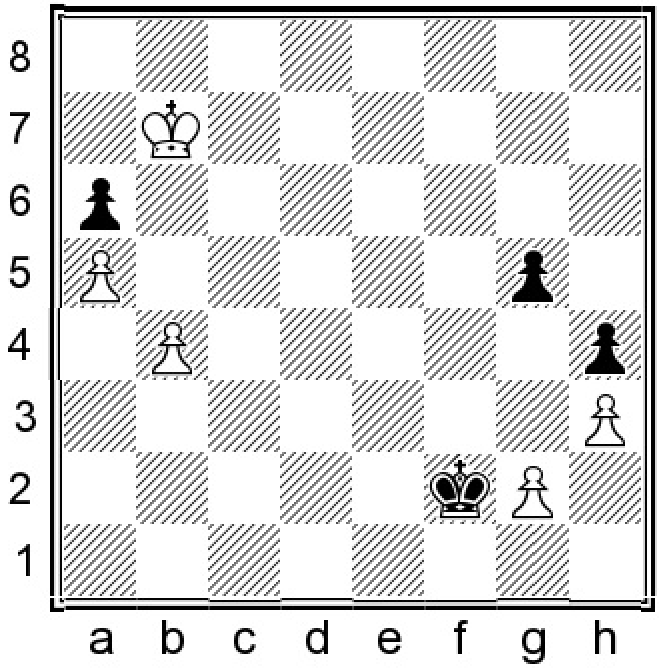
59...♕f5+ 60.♔b8!

Not 60.♔c7 ♕a5+!−+.

½-½

We shall view one more example of the important stalemate resource.

Dragan Barlov 2430
Miso Cebalo 2485
Novi Sad ch-YUG 1985



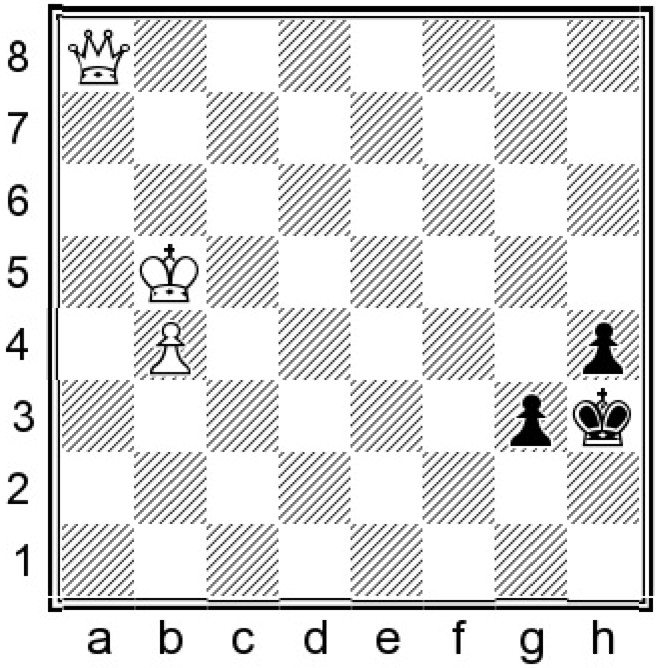
White to move

Once again a pawn ending is the prelude to our theme, and once again White's miscalculation is due probably to overconfidence and poor awareness of the pattern.

59.♔xa6?

59.b5! requires no calculation; White's pawn queens much sooner. After the move in the game it is a draw, although probably this came as a surprise to White.

59.♔xa6? ♔xg2 60.♔b5 ♔xh3 61.a6 g4 62.a7 g3 63.a8=♕

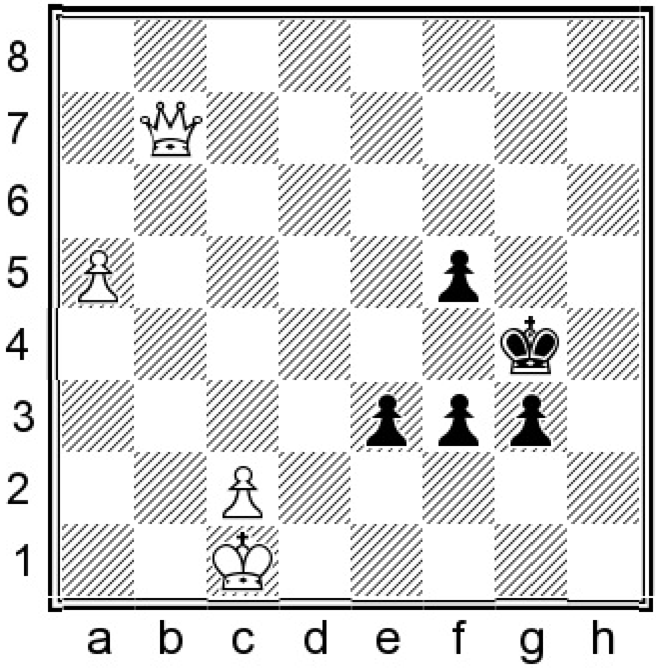


An almost identical position to the previous example, but the move which drew before now loses, while the one that lost before now draws. Without the extra pawn it is not possible to prevent the stalemate.

63...g2! 64.♕f3+ ♔h2 65.♕f4+ ♔h3 66.♕f2 g1=♕! 67.♕xg1 ½-½

And finally an example where the queen is up against a mass of pawns.

Rudolf Scheck 2195
Hubert Ebner 2275
Austria tt 1993



White to move

Although this is a position with many more pawns, the manoeuvres are very similar:

60.♕g7+ ♔h3 61.♕h7+ ♔g2 62.♕xf5 f2?

Black is the first to err with this natural move. Instead, 62...♔f2! draws, because it is not possible to prevent ...g3-g2 followed by ...♔f1.

63.♕e4+ ♔h2 64.♕h4+?

White allows himself to be intimidated by the tremendous mass of pawns so close to promotion. Instead, he could have won with a manoeuvre requiring great finesse and precision: 64.♕f3 g2 65.♕f4+ ♔h1 66.♕h6+ ♔g1 67.♕xe3 ♔f1 68.♕d3+ ♔g1 69.♕d4!, and Black either loses the f2-pawn or is mated.

64...♔g2 65.♕e4+ ♔h2 66.♕h4+ ½-½

Chapter 6
Same-coloured bishops

Endings with bishops of the same colour are more common than those with bishops of opposite colour, just a little less drawish and probably more difficult to play after absorbing the paradoxical patterns which occur with opposite-coloured bishops. Traditionally their reputation has played second fiddle to the important rook endings and the curious endings involving their opposite-coloured brothers. But such a valuation does not do them justice and might well be one of the reasons why so many mistakes are made in these endings.

The best known themes are the ones related to blocked pawns, with which we are going to start, but these are not the only ones.

Whether the pawns are blocked or not, with bishops of the same colour it is very important to put our own pawns on squares of the opposite colour to those of the bishops. There is a triple advantage to this:

1) the pawns cannot be attacked by the enemy bishop;

2) they do not limit the mobility of our own bishop;

3) most importantly, although often unappreciated, they guard the squares of the colour that our bishop is unable to guard.

This subject of the colour of the pawns is so important that it crops up in all the themes of this section, and there are many cases where, if a pawn moves to a square of a different colour, this can be decisive, as we shall see repeatedly.

Pattern 33 A very bad bishop

One of the easiest strategic concepts to explain is the bad bishop. That is the name given to a bishop which has its own pawns blocked on the squares of its colour.

There can be many pawns on the board, some blocked on the bishop’s colour and others not; in this case the pawns blocked in the centre are always the most important, because they close off the best diagonals.

In the middlegame, the bad bishop is a debated concept, but it applies quite clearly in the endgame, so much so that it will be present in most of our themes. However, I believe that the simplicity of the concept and the study of some very subtle positions have led to a certain overestimation of this pattern: a very bad bishop does not always lose and this happens for at least two reasons:

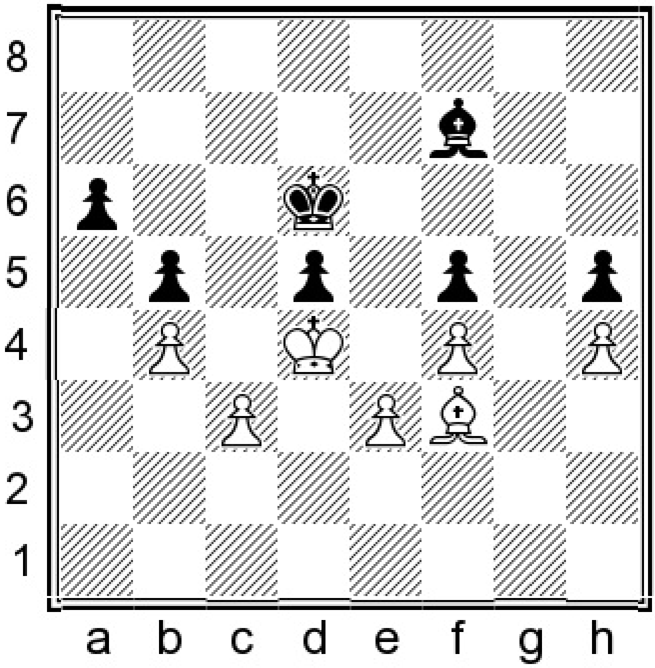
1) blocked pawns lead to closed positions and sometimes the stronger side has difficulty getting through with his king, and

2) only a pawn which is not defended by another pawn is truly a weakness, and sometimes two weaknesses are needed to win.

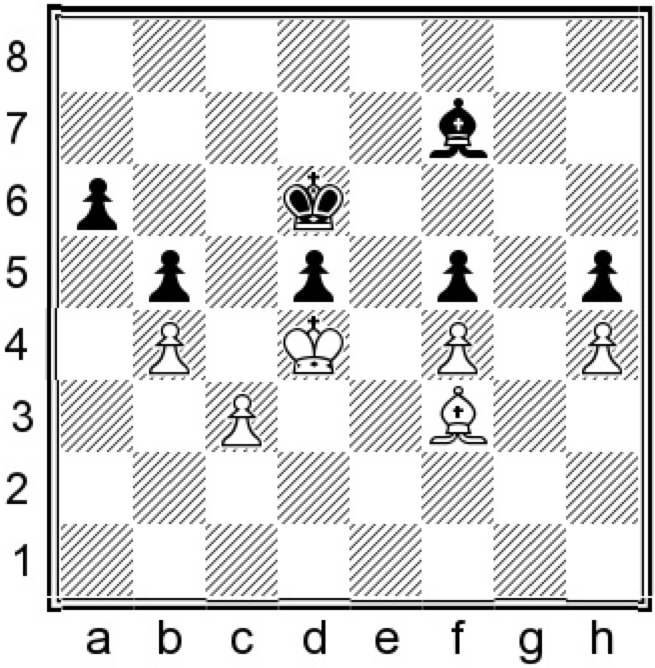
We are going to devote the first two patterns to studying the main defects of the bad bishop. In the first pattern we shall look at those cases in which many (sometimes all) pawns are blocked on the wrong colour. In the second, we shall see what happens when the pawns do not defend the squares via which the attacker's king will try to enter.

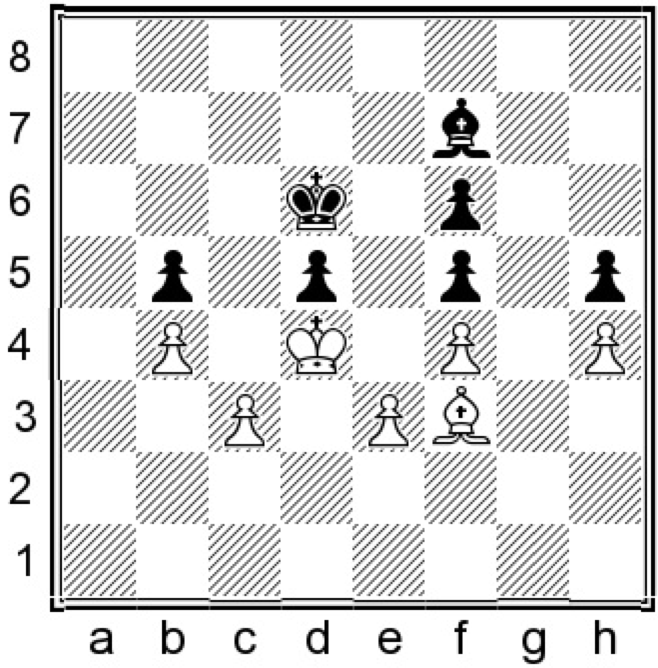
A quick look at these three positions can provide us with many ideas.

Series: The very bad bishop



Averbakh 1954





The first diagram shows the basic position presented by Averbakh in 1954. Black has all his pawns on squares of the same colour as his bishop and three of them are unprotected (four, if we count the one on a6, but that one is too far away). In addition, the black king has to stand watch over the invasion squares e5 and c5.

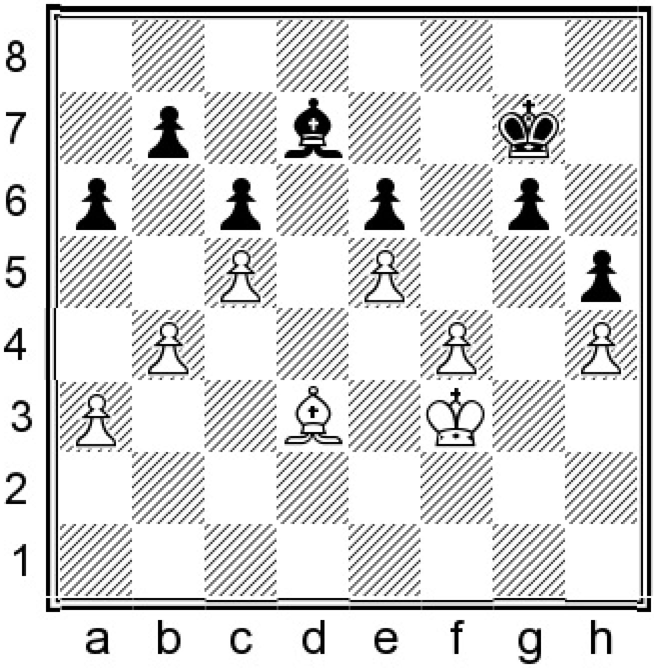
White can win by means of a manoeuvre which places his opponent in zugzwang. The simplest is **1.♗e2 ♗g6** (1...♗e8 would lead to the same thing) **2.♗d3 ♗h7 3.♗f1!**. This is the quickest, although the move suggested by Averbakh, 3.♗c2, ends up achieving the same result. **3...♗g6** (3...♗g8 4.♗e2 ♗f7 5.♗f3) **4.♗g2 ♗f7 5.♗f3** Zugzwang, Black either loses a pawn immediately or else allows the white king to enter.

However, it is interesting to observe that in the second position (where we have removed the white pawn from e3) White is still winning easily. The continuation could be **1.♗d1 ♗e8 2.♗e2 ♗g6 3.♗d3 ♗h7 4.♗b1 ♗g6 5.♗c2 ♗h7 6.♗b3 ♗g8 7.♗d1 ♗f7 8.♗f3+–**. And the same would happen (with a little more work due to the pawn break ...a6-a5) if we remove the white pawn from c3.

On the other hand, in the third diagram we have changed the position of one of the black pawns and have converted it into a completely immobile doubled pawn on f6. That makes the position drawn, because the f6-pawn covers the e5-square and prevents White from creating zugzwang. This simple fact already suggests to us that the disadvantage of being unable to cover the squares of the opposite colour is the most important factor in situations with a bad bishop.

We are now going to examine a couple of games to see how these ideas are applicable in practice, after which we shall be better prepared to be able to evaluate these situations.

Baslavsky
Pavel Kondratiev



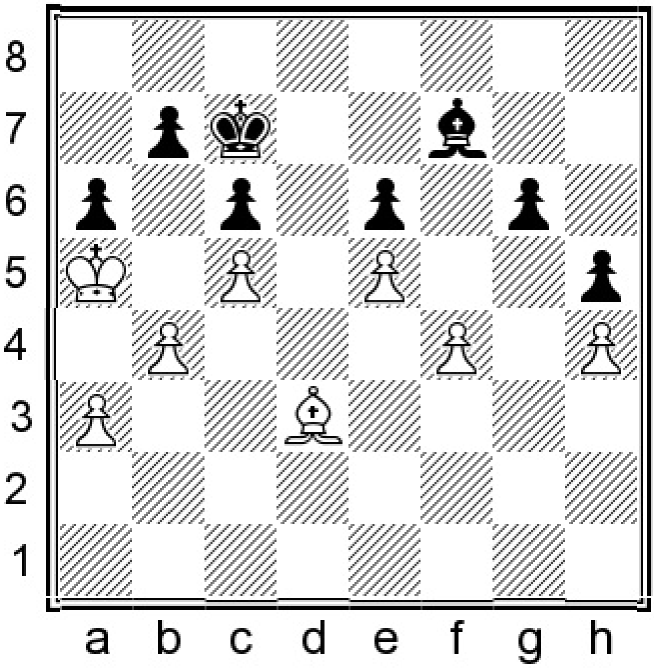
White to move

An old example, many times repeated, and very difficult to improve upon. White’s advantage is clear, as all the black pawns are situated on squares of the same colour as his bishop. However, the winning procedure is laborious, due to the difficulty in penetrating with the king.

1.♔e3!

First of all the white king heads for the queenside to support the pawn break b4-b5 and clear the way and/or create new weaknesses. For his part, the black king responds by preventing the white king from reaching b6.

1...♔f7 2.♔d4 ♗e8 3.♔c3 ♔e7 4.♔b3 ♔d8 5.♔a4 ♔c7 6.♔a5 ♗f7



The kings have reached the point of confrontation and Black can only wait. White advances his pawns in order to create new weaknesses:

7.♗c4 ♗g8 8.a4 ♗f7 9.b5 axb5 10.axb5 ♗g8

Black chooses passive defence, allowing 11.b6+. But 10...cxb5?! is no better, due to 11.♗xb5 and Black is in zugzwang, which frequently arises with passive defence in this type of ending. But it is a unilateral zugzwang, because with the move White could still bring about the same situation by force: 11...♗g8 12.♗e8 ♗h7 13.♗f7 (a new zugzwang) 13...♔d7 14.♔b6 ♔e7 15.♔xb7+–.

11.b6+!

White can make no progress without this move. Although the position becomes completely closed, there is a new weakness on the queenside, since if the white bishop reaches a6 or c6 at the appropriate moment, the way will open for the b6-pawn to queen. This forces Black to keep either his king or his bishop nearby, which allows the white king to penetrate on the other wing.

11...♔d8 12.♔b4

Heading for the kingside. Immediately after White's b5-b6+ move, Black has to consider a reassignment of tasks: with the position so closed, Black would draw if he could bring his king to f7 and his bishop to d7, but it can easily be verified that such a reorganisation is not possible, for tactical reasons.

12...♗f7 13.♔c3 ♔d7

13...♔e7 fails to 14.♗a6!.

14.♔d4 ♔d8 15.♔e3 ♔d7 16.f5!

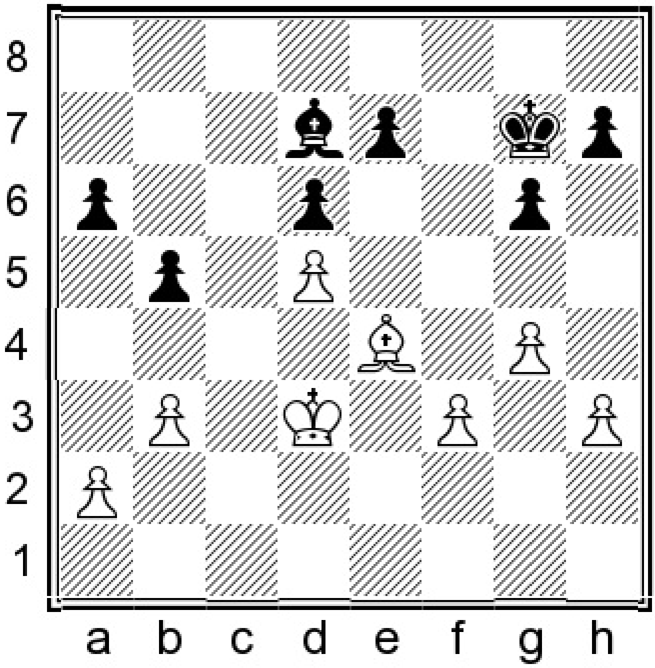
The only available pawn break, but completely impossible for Black to prevent. The white king now penetrates and White wins easily.

16...gxf5 17.♔f4 ♗g6 18.♔g5 ♗e8 19.♔f6 f4 20.♗e2

Black resigned.

Now we shall see a much more modern example, with several errors.

Judit Polgar 2686
Gadir Guseinov 2584
Aix-les-Bains Ech 2011 (8)



White to move

A curious position where both players have numerous pawns on the same colour as their bishop. Although White has more such pawns, her king is more active. The key, as we shall see in the first few moves, lies in moving some important pawns onto the other colour. Specifically, each player tries to bring one of their pawns to the squares b4 and g5.

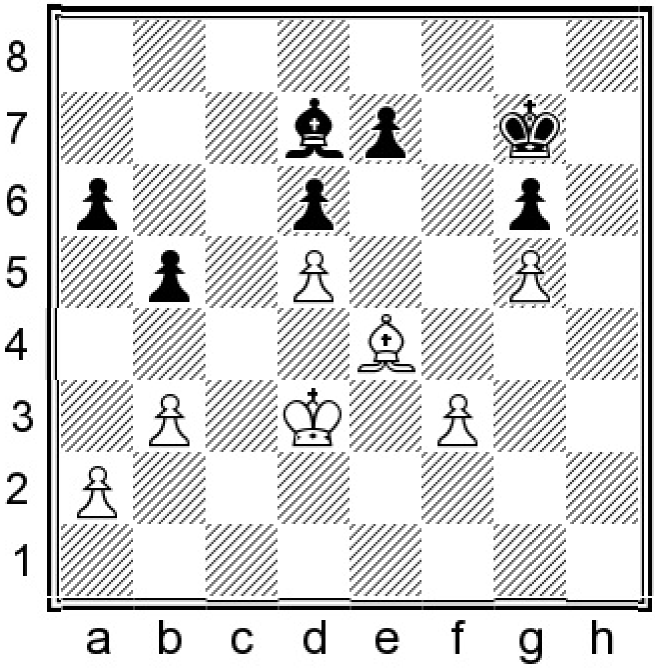
33.h4?

This is not the correct move, because it allows Black to transfer his pawns to dark squares on the queenside. With 33.♔c3! White would threaten to infiltrate, exploiting the weakness of the dark squares. Black would be forced to react and advance his queenside pawns, which will become blocked on squares of the wrong colour without gaining any tempi: 33...a5 34.b4 a4 35.h4!. White also moves the kingside pawns onto dark squares. Now 35...h6 36.g5! would reach by force a position similar to the one reached a few moves later in the game.

33.h4? h6 34.g5

It is interesting to note that it is already too late for 34.♔c3?!, e.g. 34...♔f6 35.♔b4 g5 36.hxg5+ hxg5 37.♔a5 ♗c8 38.♔b6 ♔e5, with dangerous counterplay.

34...hxg5 35.hxg5



35...♔f7?

A very strange mistake, which perhaps can be explained by the momentary sensation of weakness that the move ...b5-b4 creates. 35...b4! moves the pawns onto dark squares and the white king cannot sneak in, since after 36.♔c4 a5 the black bishop can guard the square b5 for ever.

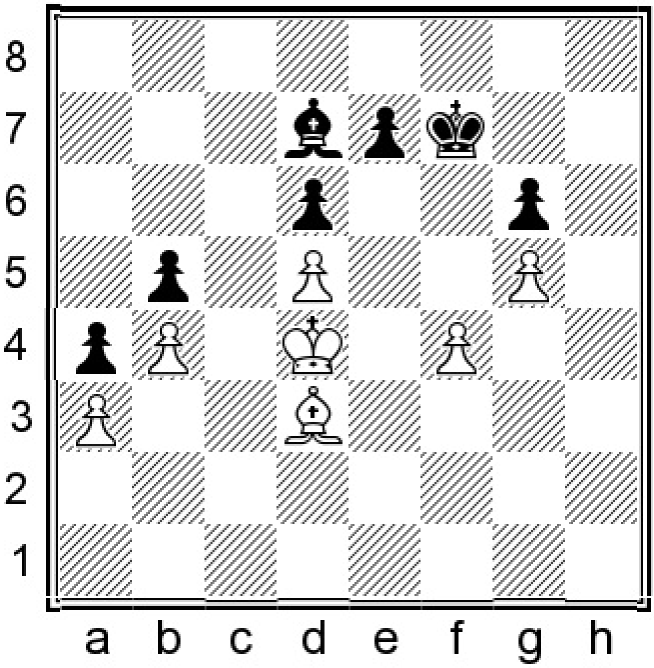
36.a3!

After this move it will not be possible for Black to move his queenside pawns onto dark squares, nor to exchange a pawn. In this sense the move is more accurate than 36.b4?!, which should also win.

36...a5 37.♔d4 ♔g7 38.♗d3 ♔f7 39.f4 ♔g7 40.♔c3!

Instead, 40.b4 allows the exchange of a pawn with 40...axb4 41.axb4 and is less clear.

40...♔f7 41.b4 a4 42.♔d4!



A comparison between this diagram and the one at the start is very revealing. White has managed to transfer four of her pawns onto dark squares and Black has allowed his own pawns to become blocked. Now that the weaknesses at g6 and b5 have been fixed in place, the white king heads for the kingside, where it can open a breach.

42...♔g7 43.♔e3 ♔f7 44.♔f3 ♔g7 45.♔g3 ♔f7 46.♗e2 ♔g7 47.♗g4 ♗f5

A moment of resistance. The immediate exchange of bishops would lead to a draw.

48.♗e2

If 48.♗xf5? gxf5 49.♔h4 ♔g6, and the king cannot enter.

48...♗d7 49.♗f1 ♔f7 50.♗d3 ♔g7 51.♔h4

Now 51...♗f5 is not possible and Black has to slightly worsen his defensive position.

51...♗e8 52.♗e2 ♔f8

If 52...♗d7 53.♗g4 and now 53...♗f5 fails to 54.♗xf5 gxf5 55.♔h5+–.

53.♗g4 ♗f7 54.♗e6 ♗e8

54...♗xe6?! 55.dxe6 would have given White an unassailable majority on the kingside, while her king could set off to capture the pawns on b5 and a4 without any problems.

55.♔g4 ♔g7 56.♔f3 ♔f8 57.♔e4 ♔g7 58.♗c8 ♔f7 59.♔d4 ♔f8 60.♗b7

Preparing the new offer to exchange on c6, which this time is decisive.

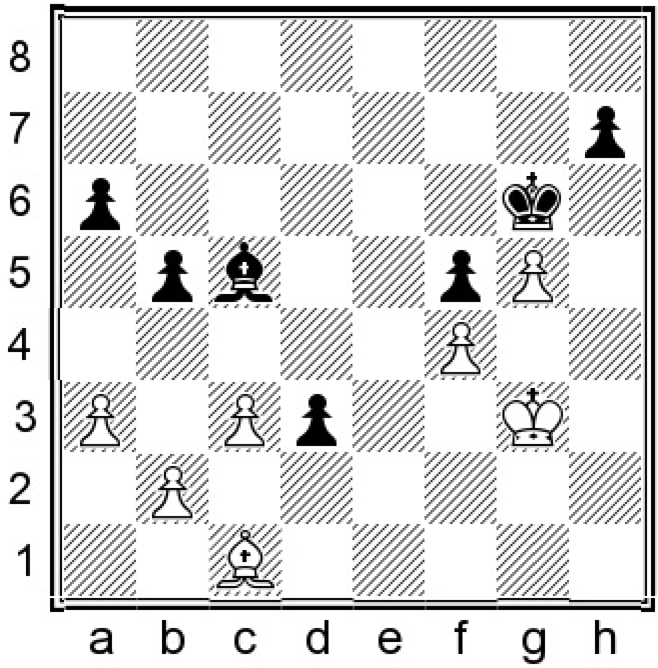
60...♗d7 61.♗c6 ♔e8 62.f5!

And Black resigned.

Pattern 34 The highway

The *highway* is a pattern that can occur in any ending in which one side has only one bishop. If all or most of the pawns are on squares of the same colour as the bishop, even if they are not blocked, there is no piece left to defend the squares of the opposite colour, and the possibility of the enemy king infiltrating via these squares becomes very serious. This is a theme closely related to the previous one, but in this case the active side benefits from the bad bishop's other defect: the fact that it cannot defend the squares which his pawns have left defenceless.

Cigdem Onur 1631
Ainhoa Ortin Blanco 1692
Budva 2013 (6)



Black to move

In the diagram position Black wins easily by directing his king towards the square b3, via the *highway* consisting of the squares f7 to b3 on the a2-g8 diagonal. But the position would be an easy draw if only the pawn on a3 were on a2.

39...♔f7!

39...♔h5?! gets Black nowhere, e.g. 40.♔f3 (40.♗d2=) 40...♔h4 41.♗d2 ♔h3 42.♗c1 ♔h2 43.b3 ♔g1

44.c4 bxc4 45.bxc4 ♔f1 46.♗d2, and the black king can make no further progress.

39...♔f7! 40.♔f3

The defence does not arrive in time. But the counterattack 40.♔h4?!, which is a question of calculation, also fails to arrive in time: 40...♗f2+ (40...♔e6 also wins) 41.♔h5 ♗e1 42.♔h6 ♔g8 (42...d2?? 43.♗xd2 ♗xd2 44.♔xh7+–) 43.g6 d2! 44.♗xd2 ♗xd2 45.gxh7+ ♔h8 46.♔g5 ♗c1 47.♔xf5 ♗xb2–+.

40...♔e6 41.♗e3

41.b3 is logical, trying to close off the light squares, but Black can reopen them with 41...a5!, intending 42...a4. Then if 42.a4 bxa4 43.bxa4 ♔d5 44.♗e3 ♗f8 and ...♔c4 cannot be prevented.

41...♗d6 42.♗d2 ♔d5 43.b3

Or 43.♔e3 ♔c4–+, followed by ...♔b3.

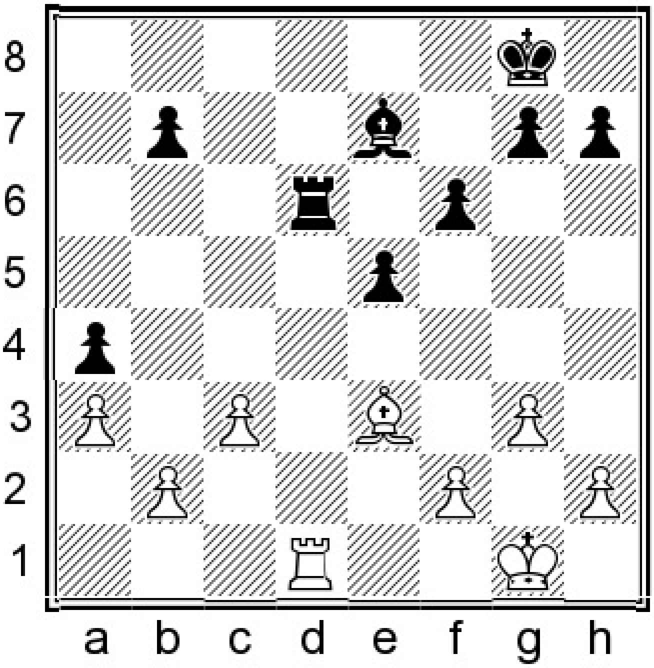
43...♗c5+!

For the theme which we are studying, the following variation is clearer: 43...a5! 44.♔e3 a4 45.bxa4 ♔c4! 46.axb5 ♗c5+ 47.♔f3 ♔xb5, after which the black king returns with ...♔b5-c4-b3.

44.♗e3 ♗xa3! 45.♗d2 ♗c5 46.♗e3 ♗xe3 47.♔xe3 d2 48.♔xd2 ♔e4 49.♔e2 ♔xf4 50.♔d3 ♔xg5 51.♔d4 ♔f6 52.c4 bxc4 53.bxc4 ♔e7 54.♔e5 a5 55.♔xf5 a4 0-1

The next game decided the 2017 Spanish U16 Championship.

Hector Sama Salinas
Gerard Ayats Llobera
Salobreña 2017



White to move

Once again both players have numerous pawns on dark squares, but the pawn on a4 fixes the whole of White's queenside on that colour. With rooks still on the board though, it is not yet serious.

29.♖xd6?

Exchanging automatically is one of the causes of many defeats. White accepts a bishop ending in which there is an extraordinary highway stretching from g8 to b3. Instead, 29.♖b1! would have allowed the white king to approach the centre and, together with possible counterplay based on b2-b3, White would have retained very good drawing chances.

29.♖xd6? ♗xd6

Now White is lost. Black's plan is simple and unstoppable: the king comes as quick as a flash to the square b3.

30.♔f1 ♔f7 31.♔e2 ♔e6 32.♔d3 ♔d5

Black threatens ...e5-e4, followed by ...♔c4. White has two ways to try to prevent it and a third option, which is just to allow this.

33.f3

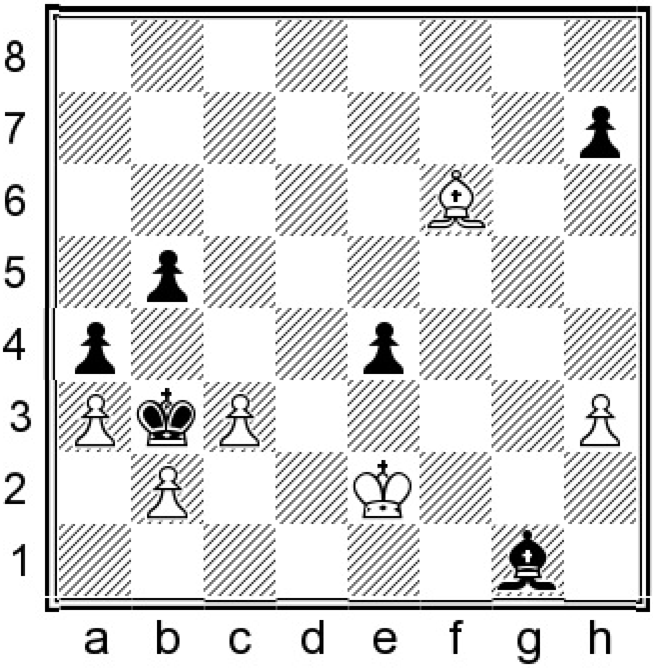
Hindering ...e5-e4, but allowing ...b7-b5, which leaves White with no moves. But after 33.c4+ ♔c6 34.f3 ♗c5! 35.♗c1 (if 35.♗xc5 ♔xc5 36.♔c3 f5 37.♔d3 e4+ the central passed pawn acts as a distant passed pawn in this case) 35...♗g1 36.h3 ♗d4 (zugzwang) 37.g4 ♔c5 38.h4 g6 39.h5 gxh5 40.gxh5 f5

White must now move and lose material, but even being able to pass would not help, since Black can make progress with ...e5-e4.

33...♗c5 34.♗d2 b5!–+ 35.g4 g6 36.♗e1 f5 37.gxf5 gxf5 38.h3 ♗g1 39.♗h4 e4+ 40.fxe4+ fxe4+ 41.♔e2

The e4-pawn is operating as if it were an extra pawn and in this case it is decisive, because it allows the black king to invade the white queenside.

41...♔c4 42.♗f6 ♔b3



The end of the black king's trek. The black king has only needed 13 moves to reach the dream square.

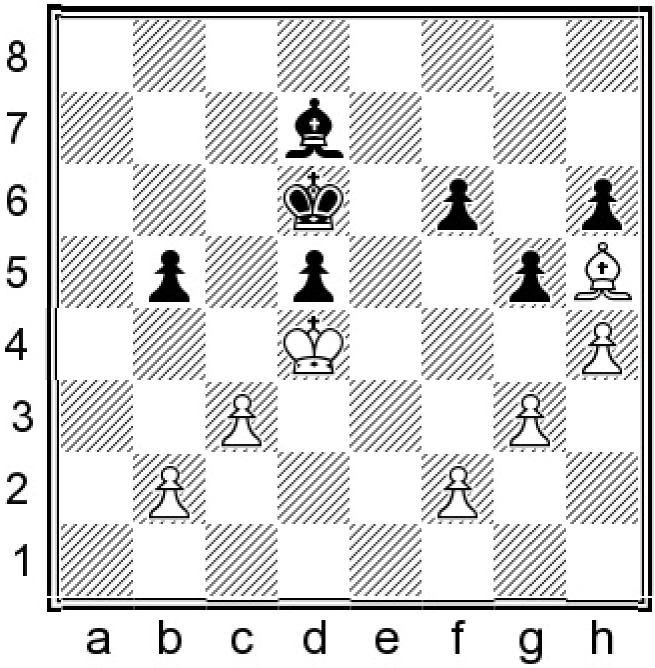
43.♗d4 ♗xd4

White resigned.

Pattern 35 An isolated centre pawn

The isolated centre pawn is an important factor in several kinds of endgames. In the case of same-coloured bishops, in order to be significant it must be blocked on a square of the same colour as the bishops. This theme is exhaustively studied in the book *Winning Endgame Technique* by Alexander Beliavsky and Adrian Mikhalchishin. I therefore recommend that any player who wants to go more deeply into this topic should study all the examples presented there. In this section I am going to limit myself to presenting the main ideas and the conclusions which I consider to be most useful.

Alexandar Matanovic
Wolfgang Uhlmann
Skopje 1976 (7)



Black to move

The presence of a central isolated pawn, fixed on the same colour as its own bishop, is an important disadvantage, but on its own is not sufficient to guarantee victory for the other side. Another disadvantage needs to be present to lose the game. Even in the event that the pawn is captured by force, using a manoeuvre based on pinning it, the result is usually a drawn position.

42...♗h3

42...♗c6 falls into zugzwang more quickly, but in essence it leads to the same outcome: 43.♗f3 ♗b7 44.b3 ♗c6 45.♗g2 (Black is already in zugzwang) 45...♗a8 46.c4 bxc4 47.bxc4 ♗c6 48.♗xd5 ♗e8 49.c5+ ♔c7 50.♔e3 ♗g6 (50...gxh4?? leaves too many squares accessible to the white king and it loses, for example 51.gxh4 ♗g6 52.♔f4 ♗c2 53.♗e4+–) 51.♗e4 ♗h5 52.f4 gxh4 53.gxh4, reaching a position similar to the one in the note to move 49.

42...♗h3 43.b3!

Ingenious, because it brings about a host of zugzwang positions, but it is insufficient to win. Black's two weaknesses are very close together and in addition the pinning trick does not work.

43...♗d7

It is best to keep defending passively like this; for example, if 43...♗g2? 44.♗e2 gxh4 (44...♔c6 45.hxg5 hxg5 46.f3 ♗h3 (46...♗h1 47.g4+–) 47.g4 f5 48.♔e5!+–) 45.gxh4 ♔c6 46.b4 ♗e4 47.♗h5 ♗f5 48.♗e8++–.

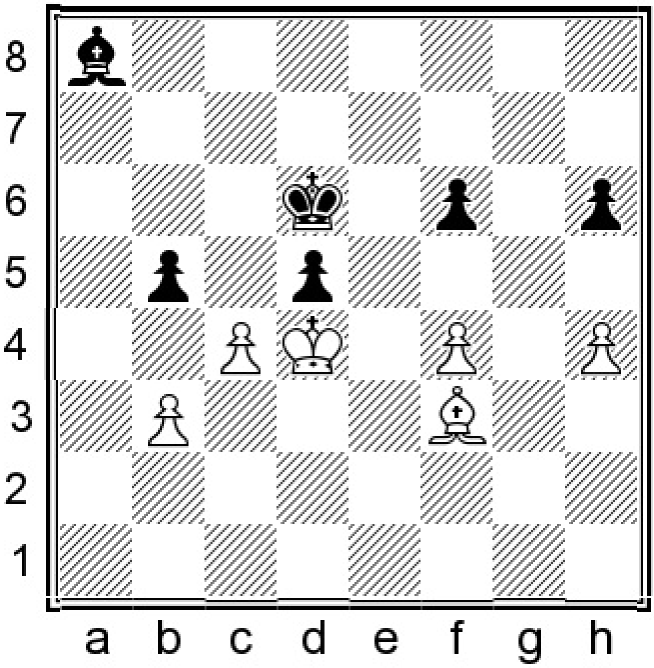
44.♗f7 ♗c6 45.f4 gxh4 46.gxh4 ♗b7 47.♗h5

The key is the fact that the pawn ending is drawn, thanks to the position of the pawn on f6: 47.♗e8 ♗c6 48.♗xc6? ♔xc6=.

47...♗c6 48.♗f3

We are in another zugzwang situation, in the sense that Black must worsen his position, but he is still not losing.

48...♗a8 49.c4



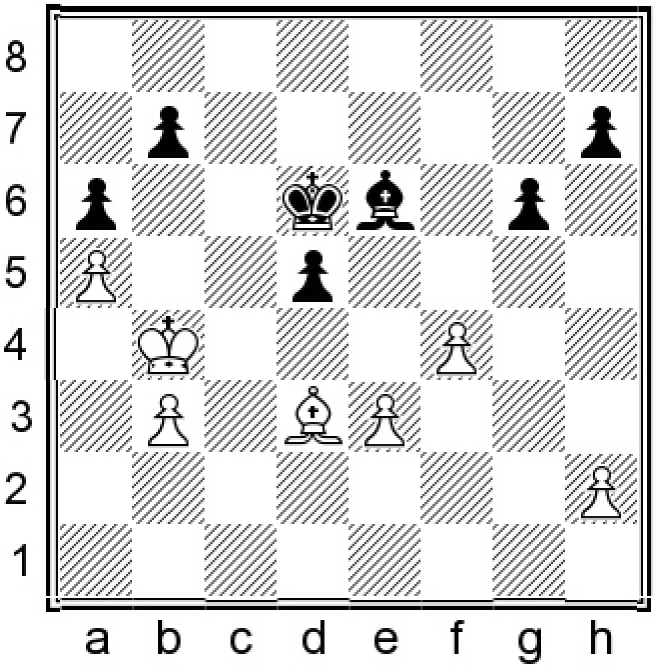
49...dxc4?

It is curious how difficulties can hypnotise the defender, who chooses an option based on remote tactical hopes which are easy to neutralise, instead of relying on a passive but unbreakable defence. The moment had come to give up the isolated pawn and set up a defensive position which we shall see again in the next two patterns: 49...bxc4! 50.bxc4 ♗c6 51.♗xd5 ♗e8 52.c5+ ♔c7, reaching the typical position with an extra pawn, which is nevertheless not winning because the white king is unable to penetrate.

50.♗xa8 cxb3 51.♗e4 b2 52.h5 b4 53.♔c4 1-0

The black pawns fall without allowing even a hint of counterplay.

Lev Polugaevsky 2640
Henrique Mecking 2540
Mar del Plata 1971 (1)



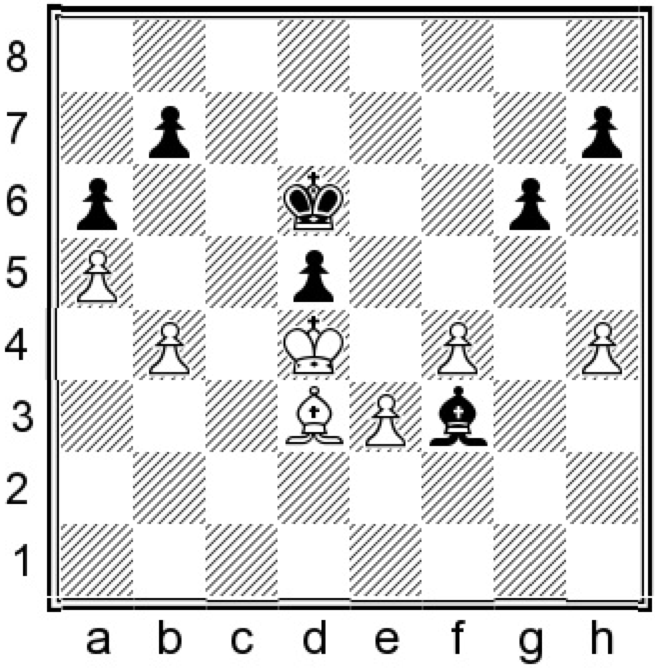
Black to move

This is a case in which the ending is completely won, because Black, in addition to the isolated pawn on d5, has several other weaknesses on the light squares. This is really a case of a very bad bishop. We can guess that the white king will go to d4 and the white bishop will attack the isolated pawn. Black can defend it in three ways: with the bishop on the diagonal e4-h1, with the bishop on c6 or with the bishop on the diagonal e6-g8.

37...♗g4

The active defence has the snag that the white bishop is able to attack the b7-pawn from c8, but Black is relying on always being able to defend it with the move ...♔c7, which would attack the white bishop. Instead, 37...♗d7 38.♔c3 ♔c5 39.b4+ ♔d6 40.♔d4 ♗e6 41.♗e2 ♗d7 42.♗f3 would have forced Black to decide between the other two options: 42...♗e6 (42...♗c6?! is the most awkward option and after 43.♗g2 Black is already in zugzwang) 43.e4! (the simplest, attacking the other weakness (b7), even though it liquidates the isolated pawn; 43.♗g2!? followed by manoeuvres should also win) 43...dxe4 44.♗xe4 ♔c7 45.♔e5 ♗b3 46.♔f6+–.

37...♗g4 38.♔c3 ♗f3 39.♔d4 ♗g2 40.h4 ♗f3 41.b4



Now all Black’s pawns are on light squares and all White’s on dark squares. This is not an unusual situation in these endings, where a weakness (in this case the isolated queen’s pawn) keeps forcing the defending side to acquiesce to a more and more passive position and place all his hopes on being able to set up a fortress, which is very unlikely here.

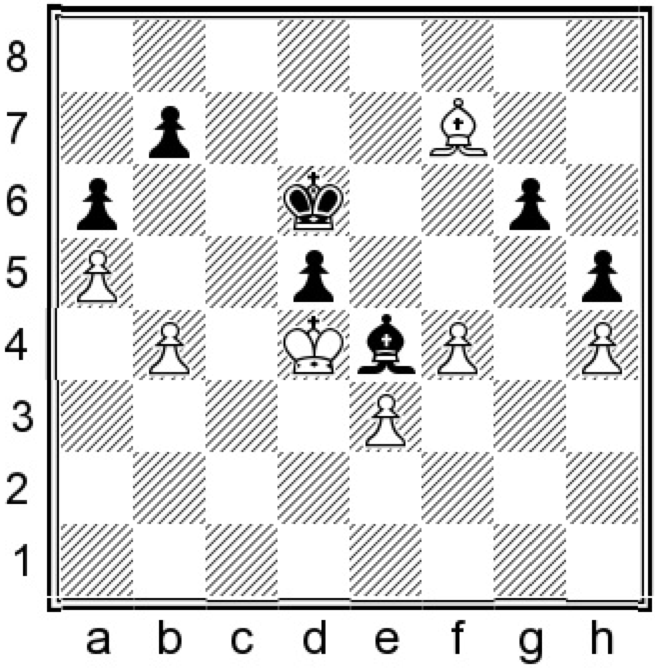
41...♗h1 42.♗e2 ♗g2 43.♗g4 ♗e4 44.♗c8 ♔c7 45.♗e6 ♔d6 46.♗g8 h6

Curiously, the white bishop is trapped inside the black camp. Perhaps Black had noticed this and had his hopes raised, but White has a natural and decisive pawn break. If it were otherwise, White would have looked for another plan.

47.♗f7 h5 48.♗e8 ♗c2

Preventing ♗a4.

49.♗f7 ♗e4



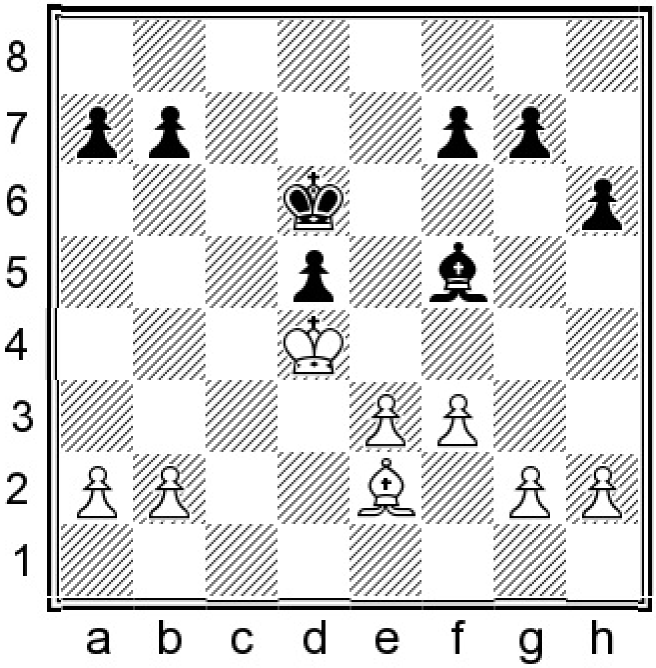
50.f5!

Conclusive.

50...♗xf5 51.♗xd5 ♗c8 52.e4 ♔e7 53.♔e5 g5 54.hxg5 h4 55.g6 h3 56.g7 h2 57.g8=♕ h1=♕ 58.♕f7+ ♔d8 59.♕f8+ 1-0

We shall now study two positions in which the only initial weakness is the isolated pawn.

Evgeny Tomashevsky 2731
Viswanathan Anand 2776
Moscow 2016 (6)



Black to move

This is the classic drawn position on this theme. Black has no other weakness besides the isolani and can defend the dark squares with the flank pawns:

29...a5

Immediately covering the dark squares. But any waiting move would also have sufficed.

30.♗b5

Or 30.♗d1 ♗d7 31.a3 ♗b5 32.♗b3 ♗c6 33.♗a2 f6 34.b4 axb4 35.axb4 b6 36.g3 ♗b7 37.b5 ♗a8 38.♗b1 ♗b7 39.♗f5 ♔e7=.

30...b6 31.♗a4 ♗c8!

Anand is alert to all the details. The bishop can defend more calmly from here, because the themes of the pin and the attack with e3-e4, to which he would be vulnerable on the other diagonal, do not exist here.

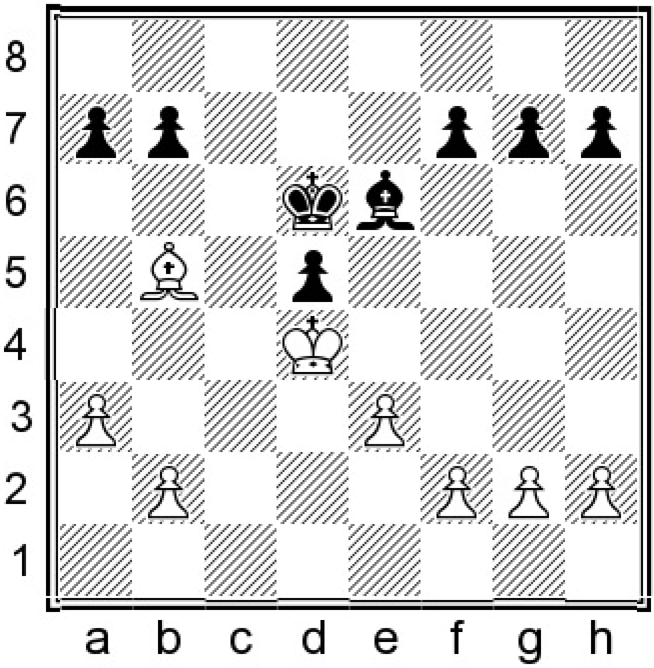
32.a3 f6 33.b4 axb4 34.axb4 ♗b7

Black adopts absolute waiting tactics and White is unable to find any way to make progress. One might consider this endgame boring, but it is the correct policy.

35.♗b3 ♗c6 36.♗a2 ♗b7 37.h4 ♗c6 38.♗b3 ♗b7 39.b5 ♗a8 40.♗a2 ♗b7 41.h5 ♗a8 42.♗b1 ♗b7 43.♗f5 ♔e7 44.♗h3 ♔d6 45.♗g4 ♔e7 46.f4 ♔d6 47.♗f5 ♔e7 48.g3 ♔d6 49.♗g4 ½-½

And now we shall see an almost identical position to the last one, but with a different final result. It is a good opportunity to analyse the reason why.

Jan Markos 2557
Igors Rausis 2480
Kallithea 2008 (7)



Black to move

27...h6?!

An inaccuracy, but one which does not put the result of the game in jeopardy. As we saw in the other example, the bishop defends more comfortably from the other diagonal: 27...b6 28.♗a4 ♗c8 29.♗b3 ♗b7 would have allowed a comfortable defence.

27...h6?! 28.♗a4!

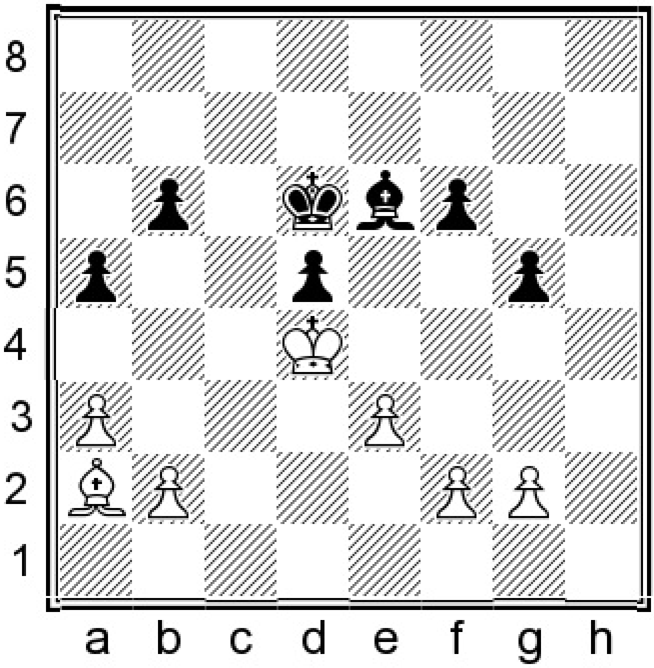
Immediately limiting Black’s bishop to the defensive diagonal e6-g8.

28...b6 29.♗b3 a5 30.h4!?

One might argue that White would have retained more options by preserving this pawn in order to have fewer exchanges, but e.g. 30.f3 g5 31.g3 f6 32.♗a2 ♗f7 33.e4 ♗h5! (it is crucial to provoke 34.g4) 34.g4 ♗e8 leads to an ending which we have already seen repeated several times. White can capture on d5 with the pawn or the bishop, but in both cases the draw is relatively easy, because he is unable to establish good control of the dark squares.

30...g5 31.hxg5 hxg5 32.♗a2 f5?!

Black is fearful of the pin and the subsequent tactical shot e3-e4. But this creates another weakness and is another small step towards disaster. Instead, 32...f6 establishes a much more flexible defensive scheme. We are going to present three tries for White by way of example, since almost all his plans result in the move e3-e4, supported by the pin and resulting in the capture of the isolated pawn.



analysis diagram

A) 33.b4 axb4 34.axb4 ♗f7 35.e4 ♗h5 36.♗xd5 (36.exd5? ♗f7=) 36...♗e2 37.f3 ♗f1 38.g3 ♗b5 39.f4 (the pawn exchanges lead to a draw, but it is difficult to imagine any other way to make progress) 39...gxf4 40.gxf4 ♗d7 41.♗c4 ♗g4 42.e5+ fxe5+ 43.fxe5+ ♔e7. This position is a draw, both from the human point of view, because there is no apparent way to make progress, and according to the Lomonosov tablebases, where it is analysed exhaustively;

B) 33.♗b3 ♗f7 34.e4 ♗e6 35.♗xd5 ♗d7 36.f3 ♗c8 appears to be drawn, much as in the previous variation;

C) 33.f3! ♗f7 (it is possible that 33...g4!, exchanging another pawn, is easier, e.g. 34.fxg4 ♗xg4 35.♗xd5 ♗d7=) 34.f4 gxf4! (the variation 34...♗e6? 35.fxg5 fxg5 36.♗b3 ♗f7 37.e4 ♗e6 38.♗xd5 ♗c8 39.e5+ ♔e7 40.♗a8 is interesting; now Black loses, because he is unable to prevent the advance of the white king via the squares d5 and c6) 35.exf4 ♗e6 36.♗b3 f5 37.♗d1 ♗d7 38.♗f3 ♗e6 39.g3 ♗d7! (39...♗f7? allows 40.g4! fxg4 41.♗xg4, which is winning) 40.♗xd5 ♗c8 and once again it is a draw.

These variations allow us to conclude that the ending with an isolated pawn remains a draw, even if the bishop is defending the pawn along the ‘bad’ diagonal (the one where it is possible to force the win of the pawn by means of the pin), always assuming that after the loss of the pawn there is no other problem in the position.

33.f3?!

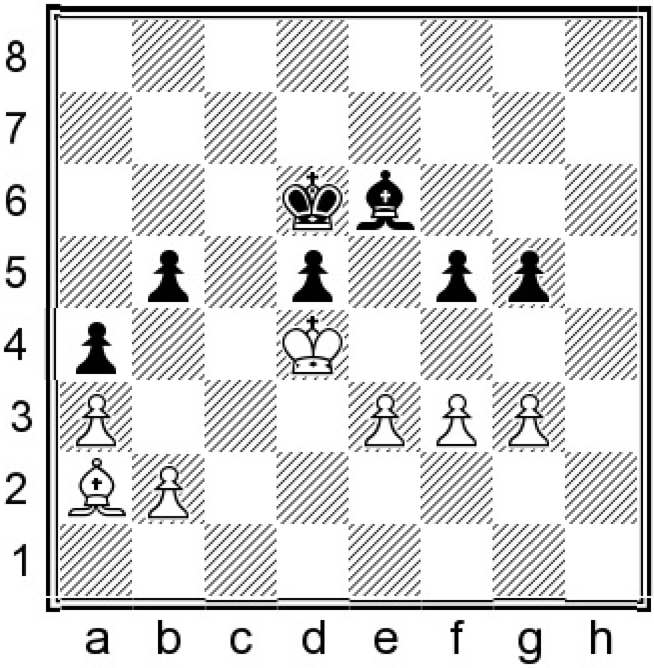
This allows a move which forces an immediate draw, although other moves do not seem to win either: 33.b4!? axb4 34.axb4 ♗f7 35.f3 ♗e6 36.g3 ♗f7 37.e4 fxe4 38.fxe4 ♗e6 39.e5+ ♔e7 40.♗xd5±; 33.g4!? fxg4 34.♗b3 ♗f7 35.e4 ♗e8 36.♗xd5 ♗b5 37.e5+ ♔e7 38.♔e4 ♗d7.

33...a4?

This move, although losing, has its logic, since it deprives the white bishop of an important square on the diagonal along which White must seek zugzwang. Instead it seems natural and simple to occupy the dark square with 33...f4! 34.exf4 gxf4 and Black should not lose.

On the other hand, 33...♗f7? is met with 34.e4 fxe4 35.fxe4 ♗e6 36.♗xd5 ♗d7 37.e5+ ♔e7 38.♔c4 ♗e8 39.♗b7, when Black cannot prevent the white king from penetrating. The reason, in comparison with similar positions, is that the black bishop does not have the square f3 available: 39...♗a4 40.♔d5 ♗b3+ 41.♔c6 ♔e6 42.♔xb6 a4 43.♗c6 ♔xe5 44.g3 ♔f5 45.♗f3 ♗c2 46.♔b5 ♗b3 47.♔b4 ♗c2 48.♔c3 ♗b3 49.♔d4 ♗c2 50.♗h5 ♗b3 51.♗e2!+–.

34.g3! b5



35.b4!

It is curious that it is always essential to keep paying attention right to the end. Here 35.b3? looks equal, but it is not, in view of 35...b4! 36.axb4 a3.

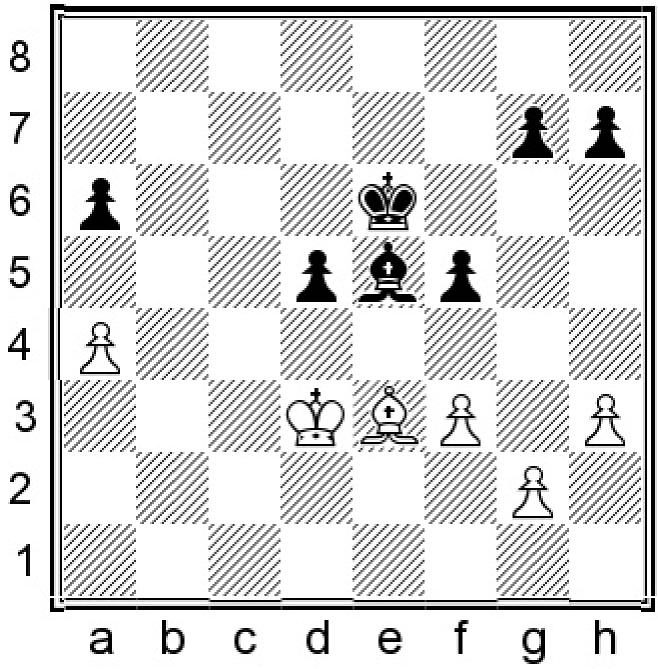
35...axb3 36.♗xb3 ♗f7 37.e4! g4 38.e5+ ♔c6 39.fxg4 fxg4 40.♗c2 ♗e6 41.♗g6 1-0

Pattern 36 A central passed pawn

It is very common for a bishop ending with an extra central passed pawn to end in a draw. Some of the same aspects as in endings with opposite-coloured bishops are present: the king cannot be attacked on squares of the opposite colour, and therefore it can be placed in front of the pawn and at the same time it is close to both wings. On the other hand, the bishop is well-coordinated with the pawns and by keeping an eye on the enemy king it can create insurmountable barriers. Naturally the same problem can also arise with a wing pawn, but then the distant pawn effect can be a factor.

In the first case below, Botvinnik did not manage to win, which should at least make us aware of the difficulty of the task.

Mikhail Botvinnik
Igor Bondarevsky
Leningrad 1941 (14)



Black to move

42...♔f6

Black launches his offensive on the kingside. Perhaps the position of the solitary white pawn on a4 (rather distant from its king) might indicate to us that there are better hopes for the other side. Let us test it: 42...♔d6 43.g4 g6 44.♗a7 ♔c6. The king is approaching. From now on we shall see the following pattern: the pawn defends the light square and the bishop guards the way through on the dark squares, carefully changing diagonal whenever Black offers the exchange of bishops. A little investigation convinces us that there is no entry on this flank: 45.♗f2 ♗d6 46.♗d4 ♗c5 47.♗f6!, preparing to respond to ...♔b6 with ♗d8 check, and to a bishop move on the a7-g1 diagonal with ♗e7. From now on, the white bishop (with the help of his pawn on a4) is able to prevent all attempts by the black king to penetrate White's position: 47...♗a3 48.♗d4 ♗d6 49.♗e3 ♗c5 50.♗g5 (the pattern repeats *ad nauseam*. Whenever Black offers an exchange of bishops, the white bishop seeks a position from which it prevents the advance of the black king) 50...♗f2 51.♗e7 ♔b6 52.♗b4 (52.♗d8+ ♔c5 53.♗e7+ ♔c6 54.♗f8 is a similar variation) 52...♗c5 53.♗d2 ♗a3 54.♔d4 ♔c6 55.♗g5 ♗c5+ 56.♔d3 ♔b6 57.♗d8+, and the black king is unable to get through.

42...♔f6 43.♗d2 ♔g6 44.♔e2 ♔h5 45.♗e1

The bishop (supported in this case by the pawns which control the g4-square), starts its manoeuvre to impede the black king.

45...♔g5 46.♗d2+ ♔h4 47.♗e1+ ♗g3 48.♗c3 g5 49.♗d4

White keeps his bishop ready to move to the diagonal e1-h4, if necessary. 49.♗f6?, for example, would have been a mistake due to 49...♗d6, planning ...♔g3, and then if 50.♔f2 ♗c5+ 51.♔f1 f4 52.♗d8 ♗e3, followed by the advance of the d-pawn.

49...g4

The only pawn break, but it fails to open enough lines.

50.♗f6+ ♔h5 51.hxg4+?

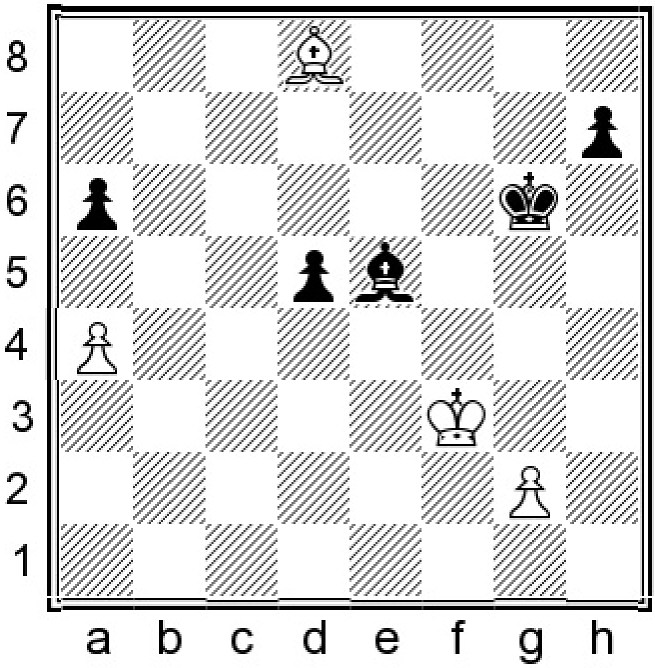
A clear mistake. The defending side should almost always wait for the exchange, maintaining their defensive pawn on the same square: 51.♔d3! gxh3 52.gxh3 ♗f2 (52...♗f4?! 53.♔d4 loses the pawn) 53.♔e2 ♗g1 54.♔d3 ♗b6 55.♗e7 and it is clear that the black king cannot penetrate on this flank either. There is a curious similarity between this defensive system and the *fortress defence* in endings with opposite-coloured bishops.

51...fxg4 52.♗d8 ♗f4 53.♗e7 gxf3+

With this move we depart from the game continuation, which created few further problems for Black, and instead we follow Averbakh's analysis.

The game continued with 53...g3? (a strange decision, probably relying on a future breakthrough on h3) 54.♔d3 ♔g6 55.♔d4 ♔f7 56.♗h4 ♔e6 57.♗d8 h5 58.♗h4 ♔d6 59.♗f6 ♔c6 60.♗h4 ♗c7 61.♗g5 ♔d6 62.♗h4 ♗b6+ (with great effort Black has managed to eject the white king from the d4-square, but now his g3-pawn is under threat) 63.♔d3 ♗f2 64.♗g5 ♔e5 65.♗h4 ♔f5 66.♗d8 ♗c5 67.♗h4 ♗d6 68.♔d4! (the king has returned to this annoying post, combining blockade with aggression) 68...♔e6 69.♔d3 ♗e5 70.♔e3 ♔f5 71.♔d3 ♔e6 72.♔e3 ♔f5 73.♔d3 d4 74.♗d8 ♗g7 ½-½.

54.♔xf3 ♗e5 55.♗d8 ♔g6


Black has managed to open up more space to enable his king to penetrate.

56.♗e7?

Averbakh only analyses this move, but it is essential to move the bishop to defend the g3-square and place the king on the blockading square d3; the same scheme works in almost all variations: 56.♗a5! (White is in time to place the bishop in its guard post on e1 – controlling g3 – and the king on the blockading square d3) 56...h5 57.♗e1 ♔f5 (threatening 58...d4) 58.♔e3! (58.♗d2? d4! and now the black king will penetrate: 59.♗e1 (59.♗c1 d3; 59.♗h6 ♗f6) 59...♗f4–+, followed by ...d4-d3 or ...♔e4) 58...♔e6 (58...♔g4 59.♔d3 ♗f6 60.♔e2 ♗h4 61.♗a5 ♔f4 62.♔d3 ♗f6 63.♗e1!=) 59.♔d3 ♔d6 60.♗d2 ♔c5 61.♗e1 (the white bishop, with the help of the two pawns controlling light squares, is able to prevent the black king from penetrating) 61...♗a1. The attempt to simplify to a pawn ending, which is a frequent resource in such cases, and which Botvinnik analysed a few moves before we joined this ending, is not enough to win here, although it requires precise defence from White, e.g. 62.♗d2 d4!? (this is the resource) 63.♗e1 ♗c3 64.♗xc3 dxc3 65.♔xc3 h4 66.♔b3!=.

56...h5! 57.g4!?

At least White is able to keep reducing the material. If 57.♗d8 ♔f5 58.♗e7 d4 59.♗b4 ♗f4!, followed once again by ...d4-d3 or ...♔e4.

57...♔f7 58.♗g5

If 58.♗h4 ♗f6! 59.♗xf6 hxg4+! or 58.♗c5 h4!.

58...hxg4+ 59.♔xg4 ♔e6

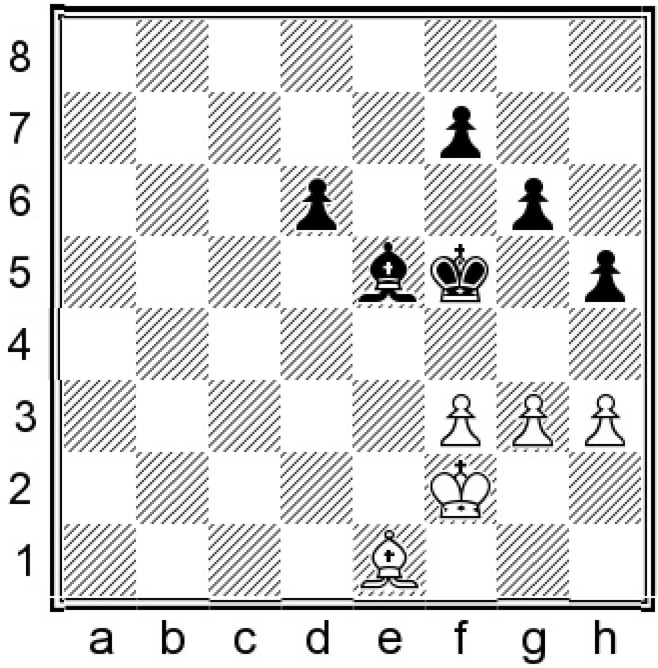
Finally the black king will invade White's camp and, despite the very limited material, Black wins without needing any more finesses.

60.♔f3 ♔d6 61.♗e3 d4! 62.♗d2 ♔d5 63.♔e2 ♔c4 64.♗a5 d3+ 65.♔d1 ♗d6 66.♗d2 ♔b3

And Black wins.

Now a similar example, with a different final result.

Hein Donner
Vasily Smyslov
Havana 1964 (19)



White to move

On this occasion Black succeeded in converting his pawn and the development of his whole plan is very instructive, but it was precisely at this moment that White missed his chance to create a fortress:

47.♗d2?

This looks harmless enough, but now the black king can reach c4 and the pawn will be able to advance to d3. It was essential to play 47.g4+ hxg4 48.hxg4+ ♔e6 (48...♔f4?? would not be a good idea: 49.♗d2#) 49.♔e3 ♔d5 50.♔d3, and with the white king established on this square, his bishop can easily cope with the task of preventing any invasion by the black king, as we have seen in the previous example.

47.♗d2?

The problem with the move in the game is that the white king has to remain one move longer on f2, to defend the pawn on g3.

47...♔e6

Now there is already no way to prevent the black king from reaching c4.

48.g4 ♔d5! 49.♔e2 ♔c4

And now the pawn cannot be prevented from advancing to d3.

50.♗e1 ♗f4 51.♗a5 d5 52.♗e1 d4 53.♗a5 ♗d6 54.♗e1 ♗b4 55.♗h4 ♔c3 56.♗e1+ ♔b3 57.♗f2 ♔c4 58.♗h4 ♗f8 59.♔d2 ♗h6+ 60.♔c2 d3+ 61.♔d1 ♔d4

61...♔c3? would have been a serious mistake, since after 62.♗f6+ ♔c4 63.♗d8 ♗f4 64.♗b6 the white bishop reaches its ideal defensive position (ready to give check on a5) and it seems that the fortress is impregnable, e.g. 64...♗g5 65.♗c7 (65.♗f2? ♔c3!) 65...♗e3 66.♗d8=.

62.♗f2+ ♔c3

Threatening 63...d2.

63.♗b6 d2

The black king has gained the decisive d3-square.

64.♗f2 ♔d3 65.♗b6 ♗f4 66.♗f2 ♗e5 67.♗g1 h4

Preparing the pawn ending. 67...♗d4? would have been premature: 68.♗xd4 ♔xd4 69.♔xd2 and the ending is a draw.

68.♗f2 ♗c3 69.♗g1 ♗d4 70.♗xd4

70.♗h2 g5! (70...♔e3 also wins) 71.♗d6 ♔e3 and it is all over.

70...♔xd4 71.♔xd2 ♔e5 72.♔e3 g5

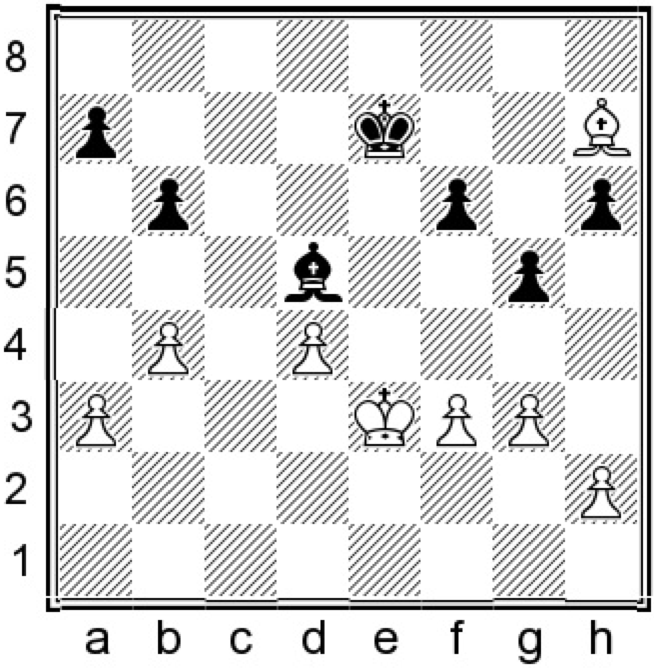
And Black wins by invading on f4 with the king, since he has another reserve tempo with ...f7-f6 available.

Conclusion: An extra central pawn is normally not sufficient to win with same-coloured bishops. The defensive system is to place the king directly in front of the pawn and use the bishop, along with pawns placed on the opposite colour to the bishop, to prevent the opposing king from encroaching.

Thus, this is a fortress-type defence and, as usual with this type, it will not work if a zugzwang is possible, or if other weaknesses are present.

Series: A central passed pawn

The two positions studied above are from the games of two great world champions and have been seriously studied by the new generations. Modern masters use this resource in almost routine manner.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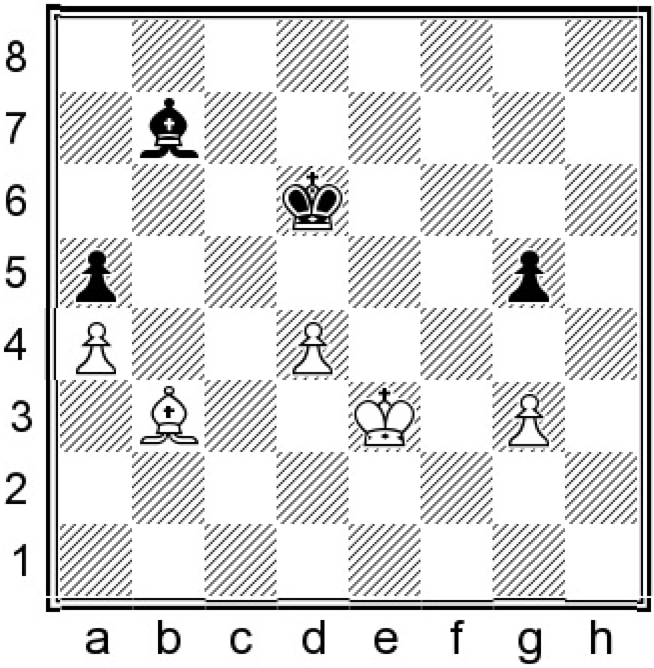
Nakamura-Duda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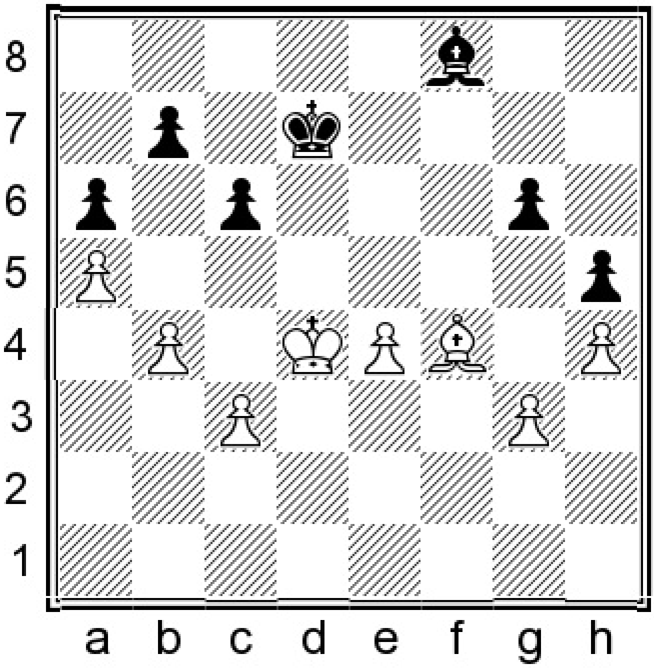
Nakamura-Duda



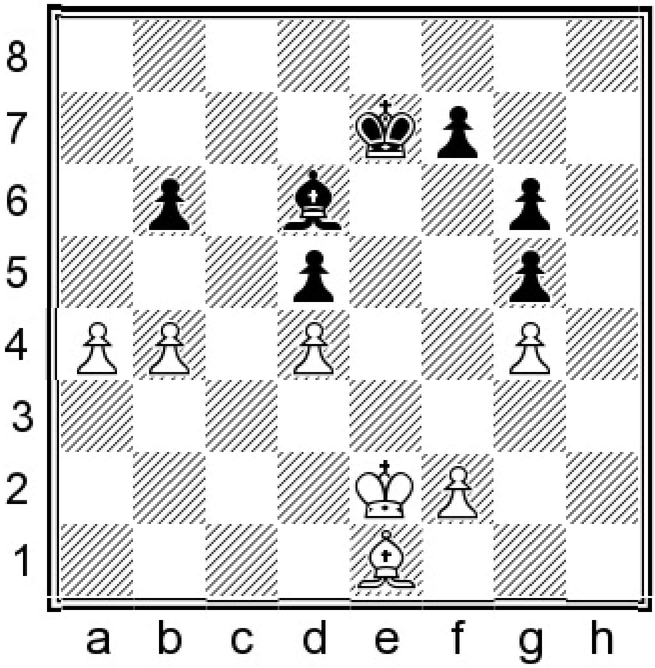
Grandelius-Postny

The three positions shown in these diagrams all come from the year 2019. The first shows the game Nakamura-Duda from the St Louis rapid tournament at move 35. The second is the same game after move 108, in other words 73 moves later. The third is from a game in the Germany Bundesliga from that same year. Black placed his king on e6 and held the fortress for a further 24 moves.

Pattern 37 The king’s entry

The king’s entry is a problem typical of all endings, and it has some specific characteristics in same-coloured bishop endings. Coordinating the bishop and one or more pawns in order to cover the enemy king’s entry squares usually prevents the exploitation of a healthy extra pawn. We saw this in the previous section and we shall see it again in other sections. The main cause of this difficulty is that it is not possible to force the defender’s king to move if it is placed on a square of the opposite colour to the bishop, as we see in the third example below.

Ivan Salgado Lopez 2622
Pavel Eljanov 2723
Dubai WCh rapid 2014 (9)



Black to move

In this diagram we encounter a relatively simple case of closing off the passage. White has a potential passed pawn on the queenside and seems to have some winning chances, but Black’s next move makes it clear that this is not the case:

36...b5!

Probably the ending would also be a draw after 36...♔d7, since the white king has only a very narrow path to infiltrate, but 37.b5 would maintain an advantage which White could work with: 37...♗c7 38.♔d3 ♗d6 39.♗c3 ♗c7 40.♗d2 f6 (40...♗d6? 41.♗xg5) 41.♔c3 ♗d6 42.♔b3 ♗c7 43.♗b4 ♗b8 44.a5 bxa5 45.♗xa5 f5 46.f3 ♗g3 47.♗b4 ♔c7 48.♗c5 ♗e1 49.♔a4 ♔b7, and here too the white king has no way in.

36...b5! 37.axb5?

A desperate attempt to keep the position open, which even creates some slight problems for White. Instead, 37.a5 creates a protected passed pawn but the position then becomes completely blocked up, for example 37...♔d7 38.♗d2 f6 39.f3 ♔c6 and there is no possible pawn break.

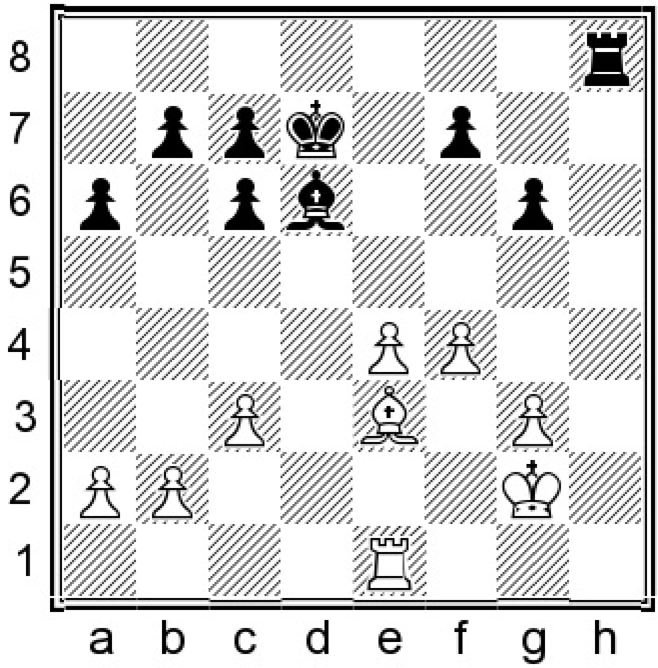
37...♔d7 38.♗d2 f6 39.♔d3 ♔c7 40.♔c2 ♔b6 41.♔b3 ♔xb5 42.f3 ♗g3 43.♗c3 ♗f2 44.♗b2 ♗e1 45.♗a3 ♗d2

And now Black even manages to win the proud passed pawn.

46.♗b2 ♗xb4 47.♗a1 ½-½

Now it is Black who is left without an entry for his king. White can make waiting moves indefinitely with his bishop on the a1-c3 diagonal.

Jesus de la Villa
Lawrence Cooper
Benasque 1996 (9)



White to move

White has the pleasant classic endgame resulting from the Exchange Variation of the Ruy Lopez, but now the offer to exchange the rooks is premature:

25.♖h1?

Here 25.c4! would have allowed White to try to create new weaknesses and a more promising passed pawn in the future.

25.♖h1? ♖xh1! 26.♔xh1 f5!

This simple move dashes all White's hopes. Thanks to his control of the f5-square, Black will never allow the white king to enter. It is clear to me that before this game my understanding of the importance of a king entry in same-coloured bishops endings was deficient.

27.exf5

27.e5 creates a protected passed pawn, which would be decisive in a pawn ending and powerful in an ending with rooks or knights, but with these bishops it is harmless: 27...♗e7 28.♔g2 ♔e6 29.♔f3 b5 30.g4 c5 31.b3 c4 32.bxc4 bxc4 and Black can wait, almost for ever, because the white king is unable to penetrate via h4 (due to the bishop) or d4 (due to the black king on d5) or a3 (the bishop again).

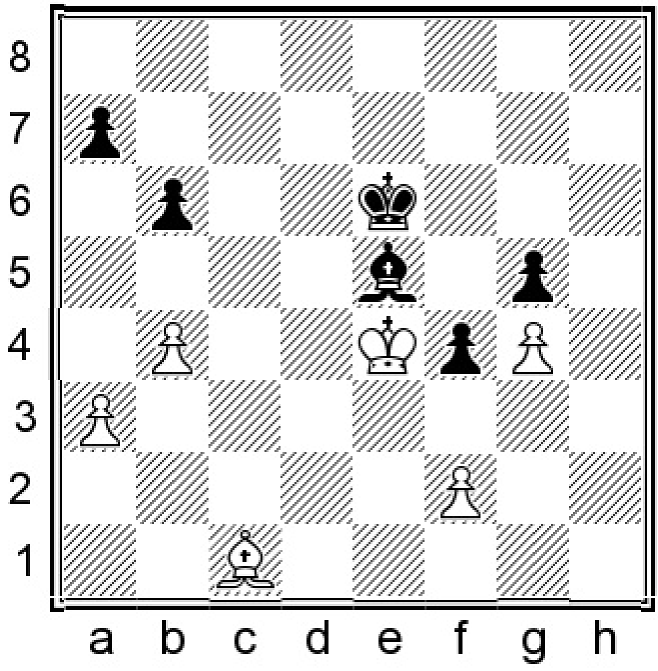
27...gxf5 28.♔g2 ♔e6 29.♔f3 c5 30.c4 c6 31.♗d2 b5 32.b3 ♔f6 33.♗c3+ ♔g6 34.g4

White launches his only pawn break, but Black can just wait:

34...♗f8!

With a draw.

Yuriy Kuzubov 2635
Carmi Haas 2223
Zurich 2009 (1)



White to move

In this position, despite the two pawns blocked on the wrong colour, Black can draw, because the white king has no entry. Here we see one of the disadvantages of a bishop, that it is unable to dislodge a king from a square of the opposite colour. In this case the king establishes itself on e6 and controls the two light squares via which the white king could enter. White can force one or both black queenside pawns to be blocked on dark squares, but even then he cannot win by force. Now White has two moves to prevent ...b6-b5, which would make the draw obvious:

38.a4?!

38.b5! leads by force to the same situation as in the game, but without allowing the defence 38...a6.

38.a4?! ♗c3

38...a6 draws more easily: 39.b5 axb5 40.axb5 ♗f6 (for the moment the black bishop stays on the long diagonal; the only active plan for White is to attack the b6-pawn) 41.f3 ♗g7 42.♗d2 ♗f6 43.♗e1 (this is the critical moment; the threat of ♗f2 looks winning) 43...♗e7 44.♗f2 ♗c5! (exploiting the fact that the pawn ending is drawn) 45.♗e1 ♗e7 46.♗c3 (White seizes the long diagonal and now has another plan: to attack the pawn on g5) 46...♗c5 47.♗g7 ♗d6 and now 48.♗h6? is not possible due to 48...♔f6–+.

39.b5 ♗f6 40.♗d2

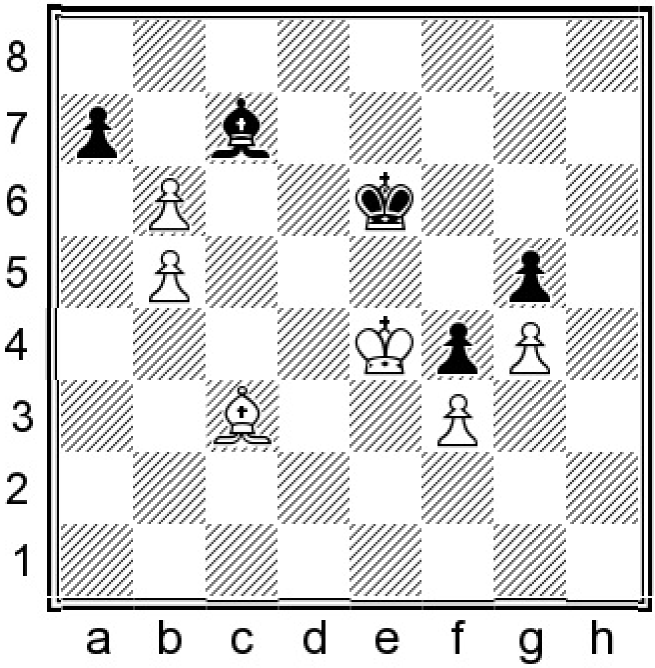
White is short of plans. The pawn break on a5 seems the only way to make any progress.

40...♗d8 41.♗c3 ♗c7 42.♗d4 ♗b8 43.f3 ♗c7 44.♗c3 ♗b8 45.a5 ♗c7

Black attacks the pawn on a5 and compels White to make a decision. The exchange of pawns would indeed have led to a desperate position, e.g. 45...bxa5? 46.♗xa5 ♗d6 47.♗d8+–; but 45...♗d6 also draws, with the idea of defending frontally, e.g. 46.axb6 axb6 47.♗d4 ♗c5!=.

46.axb6

A good practical option. Instead, 46.a6!? closes the position but creates the possible threat of ♗xb6; Black is able to parry this with his bishop on c7, d8 or b8, which makes it more difficult for White to create a zugzwang, e.g. 46...♗b8 47.♗d4 ♗c7! 48.♗g7 (48.♗f2 ♗b8=) 48...♗d6! (the bishop must keep e5 under control and be ready to defend the g5-pawn) 49.♗h6 ♗e7=.



46...axb6?

Only this serious mistake lets White win. Instead, 46...♗xb6! maintains an easy draw, because the white king has no entry. It is curious that in this case, Black’s pawns and bishop only cover the dark squares, but the king is able to cover the two light invasion squares (f5 and d5): 47.♗b4 ♗d8 48.♗f8 ♗b6 49.♗h6 ♗d8 50.♔d4 ♗b6+ 51.♔c4 ♗d8 52.♔c5 ♗e7+ 53.♔c6 ♔f6 54.♔b7 ♗c5 55.♔c6 ♗e7=.

47.♗d4 ♗d8 48.♗e5!

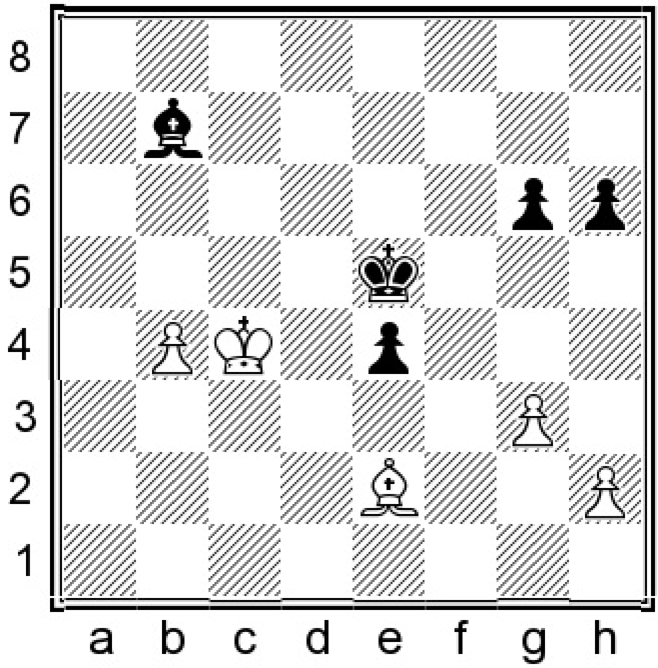
Zugzwang.

48...♗e7 49.♗c7 1-0

Pattern 38 Distant passed pawn

The strategy for winning with a distant passed pawn is very well known from pawn endings and is specifically the first pattern in this book. First the pawn advances as far as it can and when the enemy king is forced to go and stop it, the attacker’s king bursts in like a bull in a china shop and captures all the pawns on the other wing. This simple strategy loses some of its effect but still works in endings with minor pieces, although not to the same degree in all of them. Here we shall see how it works with same-coloured bishops.

José Carlos Ibarra 2413
Va Daskevics 2314
Halkidiki 2003 (9)



White to move

In the diagram we have a same-coloured bishops position with a distant passed pawn. We are going to try to discover if it is enough to win in this position and if so, why.

48.b5?!

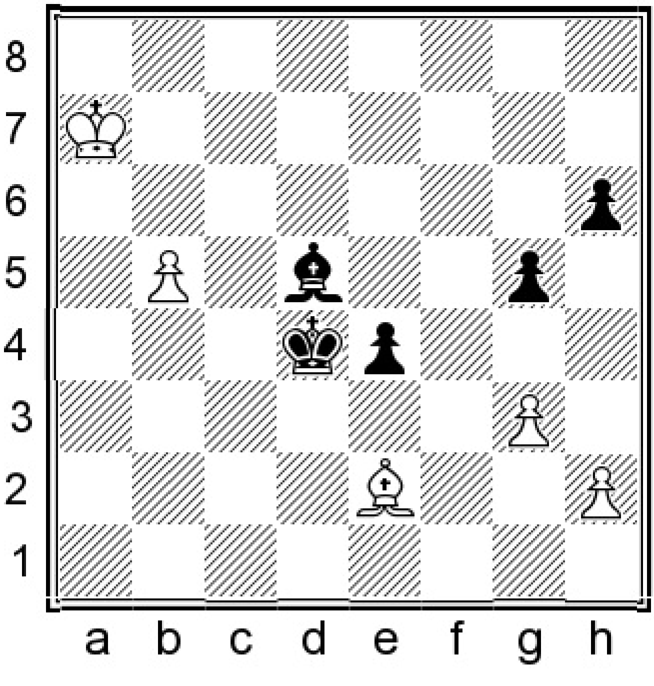
Advancing the passed pawn is a normal plan. Let us recall that with a distant passed pawn White's idea is to make the black king move across to deal with it and then to invade the other wing with the white king. Now the concrete threat is the manoeuvre ♗e2-g4-d7-c6, which Black is going to prevent. Analysis will show us that this move does not advance the main objective (which is to divert the black king), but the most promising plan is very hidden and we shall study it separately later.

Now we come to an important moment for Black, when he can choose between many alternatives, with very different consequences. We shall study the interesting option 48.♔c3 in the next position.

48...h5?

The game continuation is erroneous, although it makes sense, if we consider that White was threatening to win with ♗e2-g4-d7-c6. We shall consider two alternatives:

A) 48...g5?! is a natural move, placing the pawns on the right colour, but in this case it suffers from not opposing the winning plan: 49.♗g4! (49.♔c5?! is an example of a bad division of labour and therefore a bad plan. The king insists on supporting the pawn and the advantage of the distant passed pawn becomes a disadvantage, because instead of diverting the opposing king, it diverts his own: 49...♗a8 50.♔b6?! ♔d4 and now it is White who has problems. It is important to observe that the theoretical advantage of the distant passed pawn has turned against White, because he sent his king to support it, after which it is the black king which can take advantage of 'being closer': 51.♔a7 ♗d5



analysis diagram

52.b6? (this even loses; 52.♔b6) 52...e3 53.b7 ♗xb7 54.♔xb7 ♔c3 and clearly the black king is benefitting from being closer and Black wins) 49...♗d5+ 50.♔c3! (the right direction; the white king must stop the e4-pawn; 50.♔c5 e3=) 50...e3?! (50...♗b7 51.♗d7 leads to a position which we shall analyse when considering the alternative 48.♔c3) 51.♔d3, and the black pawn is lost without having achieved anything;

B) 48...♗d5+! maintains the defence. With 49.♔c3 White continues to impede the advance of the pawn, but after 49...♗e6 50.b6 ♗c8 51.♔c4 ♗a6+ 52.♔c5 ♗b7, followed by ...e4-e3, e.g. 53.h4 e3!, neither side can make any progress.

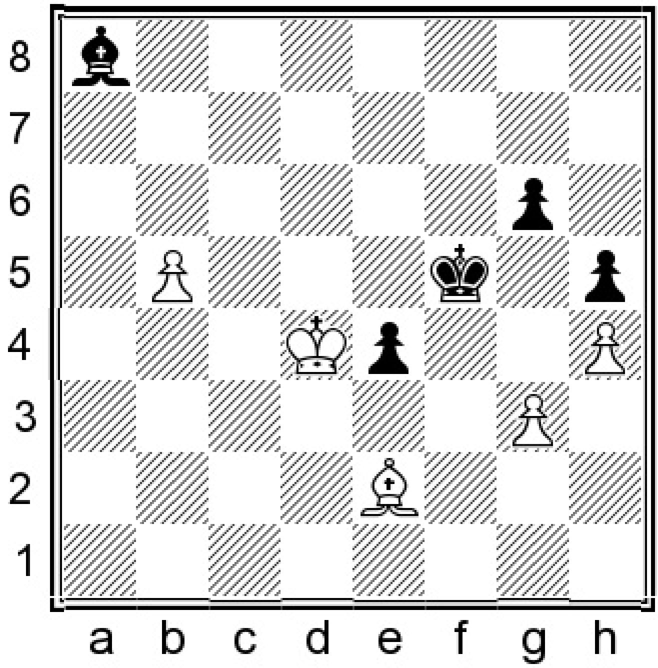
49.h4!

White seizes his opportunity and accumulates new advantages to exploit in the future: the two black pawns blocked on light squares will be a new object of attack.

49...♔f5

Seeking some counterplay... and with success. Waiting tactics seem more natural, but lose in the end: 49...♗a8 50.b6! ♗d5+ (forcing the white king to make an important decision; 50...e3 51.♔d3+–) 51.♔c3! (as we shall see many times in this ending, the task of White's king is always to control the enemy passed pawn and never to support his own pawn; 51.♔c5 e3! is again a draw) 51...♗b7 52.♗b5! (now the bishop infiltrates, to exploit the new weaknesses created on g6 and h5) 52...♗d5 53.♗e8 ♔f5 54.♔d4 ♗b7 55.♗d7+ ♔f6 56.♗h3 g5 57.♗f1 gxh4 58.gxh4 ♔g6 59.♔e5! with complete domination: 59...♔h6 60.♔f4 ♔g6 61.♗g2+–.

50.♔d4 ♗a8



Black waits. The white bishop will have to give up control of g4 and then the counterplay will start. From now on we shall diverge from the game and take the correct continuation as our main line.

51.♗c4!

To attack the pawns from behind and at the same time threaten the manoeuvre ♗c4-f7-e8-c6, although this allows counterplay by the black king. The game continued 51.♗f1?. In this move we can see one of the most frequent errors in technique. White hastens to do something concrete but fails to take care and falls for a simple counterstroke: 51...♔g4!. Black has gained more counterplay and now it should be a draw. But White makes another very typical mistake, relying on a tactical detail to queen his pawn: 52.♗g2? (52.♗c4!, seeking liquidation, is the right way to split the point now: 52...♔xg3 53.♗f7 ♔f2 54.♗xg6 e3 55.♗xh5 ♗f3! 56.♗xf3 ♔xf3 57.b6 e2 with a draw) 52...e3! (White did not reckon with this and now he loses) 53.♗f1 ♔f3. The black pawn has become much more dangerous, and Black should win. The game ended in a draw, but that lies outside our theme.

51...♔g4

51...♗b7 is the waiting strategy, which once again does not work: 52.♗f7! ♗c8 (52...♗a8 53.♗e8+–) 53.♗e8 ♔g4 54.♔xe4 ♔xg3 55.♔e5 ♗h3 56.♔d6 ♗f1 57.b6 ♗a6 58.♗xg6 ♔xh4 59.♗d3 and the pawn queens.

52.♗f7! ♗b7

Or 52...♔xg3 53.♗xg6 ♔xh4 54.♗xe4+–.

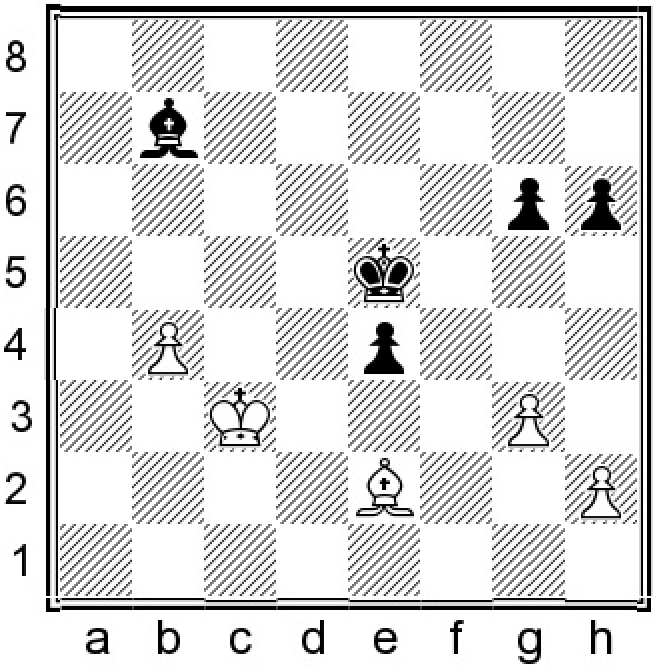
53.♗xg6 ♔xg3 54.♗xe4! ♗c8 55.♔e5 ♔xh4 56.♔d6 ♔g3 57.♔c7

57.b6? would be tragically hasty in view of 57...♗a6, and White can no longer win.

57...♗g4 58.b6+–

And the pawn queens. In this variation we can see that White could have won against the erroneous 48...h5, but not against correct defence.

We are now going to analyse another plan, if White plays 48.♔c3 instead.



analysis diagram

Let’s go back. Having confirmed that 48.b5 does not achieve its objective, we shall now analyse this promising alternative. What is the idea of this move? Simply to carry out the initial plan, exploiting the advantage of the distant passed pawn. We should not send the king to support the pawn (because then our king is diverted, and the effect of the distant passed pawn becomes a boomerang) but should instead try to compel the black king to make a diversion to control the pawn. More specifically, the white king will move to deal with the central pawn and the bishop will execute the manoeuvre ♗e2-b5-e8, and after b4-b5, ♗c6. If the black king then approaches to capture the annoying pawn, the white monarch will pounce like a hawk on Black’s kingside pawns, not without first having devoured, on its way, the pawn on e4. With this division of labour White applies the maximum pressure and wins in many natural variations, although with perfect defence it seems that the ending is still drawn.

48...♗c8!?

This is a great defensive plan. The bishop is deployed to f5, where it defends the kingside and sets up the idea of a possible ...e4-e3 (because it will control the d3-square).

We shall consider seriously one of the logical alternatives. 48...♗d5+ is a waiting move which proves to be very resilient: 49.♗b5! ♗b7 50.♗e8 g5 51.b5 ♔d5 and we arrive at a crucial position. The e4-pawn will fall soon, but this does not seem to be enough to win: 52.♔d2!? ♗c8! (the bishop has to change diagonal; 52...♔d4? 53.♗c6; 52...♔c5? 53.♔e3 ♔d5 54.♗c6+!) 53.♔e3 ♗h3! 54.♗c6+ ♔c5 55.♔xe4 h5, followed by ...h5-h4 and the exchange of pawns, and although White has won the central pawn and would have good winning chances in a practical game, the reduced material makes the position drawish.

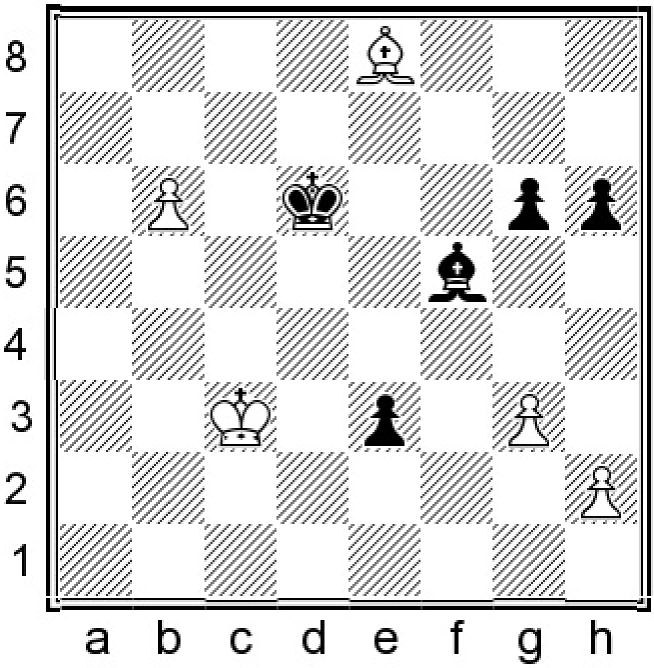
49.♗b5 ♗f5!

This is the key defensive idea. The bishop takes control of the d3-square and Black threatens 50...e3, i.e. Black is counterattacking.

50.♗e8

This puts pressure on the g6-pawn and sets up a threat of ♔d2. The immediate 50.♔d2 fails to 50...♔d4! 51.♗e8 e3+ 52.♔e1 ♗d3 53.b5 ♔c5 and now Black can capture the pawn, because the resulting pawn ending is not winning, e.g. 54.h4 ♗xb5 55.♗xb5 ♔xb5 56.♔e2 ♔c4 57.♔xe3 ♔d5 58.♔f4 ♔e6=.

50...e3! 51.b5 ♔d6 52.b6



Threatening ♗b5, followed by ♗d3 or ♔d4.

52...g5! 53.♗b5 ♗g4!

Now it is essential to support the advance of the pawn to e2. After 53...♗g6? 54.♔d4! e2 55.♗xe2 ♔c6 56.♗d3 ♗f7 57.♔e5 the white king invades the kingside; however, 53...♗c8! followed by ...♔c5 also draws.

54.♔d3 e2 55.♔d2 e1=♕+

Diverting the white king to the maximum. Here 55...♗c8 should also draw but is not quite as good: 56.♗xe2 ♔c5 57.♔e3 ♔xb6 58.♔d4±.

56.♔xe1 ♗c8 57.♔d2 ♔c5

The distant passed pawn falls, without having done its job.

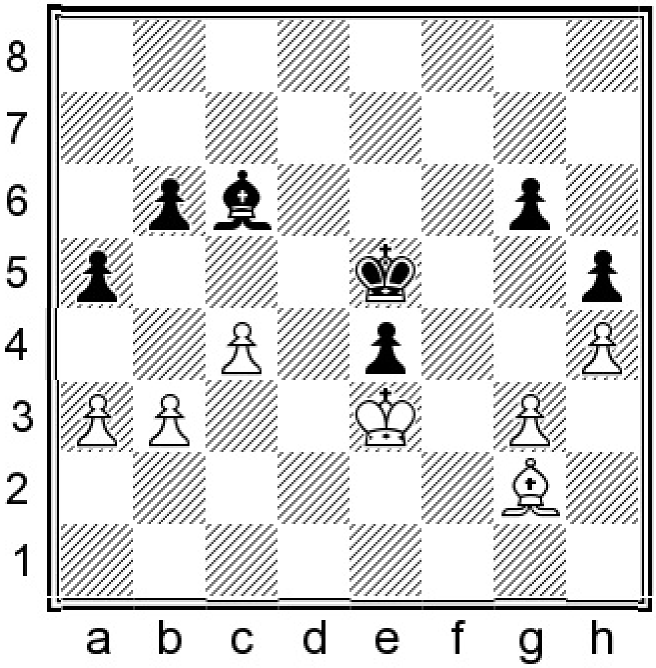
58.♗e2 ♔xb6 59.♔e3 ♔c5 60.♔e4 ♔d6!

The white king is unable to enter; it’s a draw.

The conclusion is that 48.♔c3 does not win either, but it creates many more problems and it has allowed us to see many important ideas. Some other small detail, such as if the white king were on c3 from the beginning, would be enough to upset the balance. And what if the white king were on e3? In that case the position is a definite win; the white king should attend to Black’s passed pawn, while the bishop and the b-pawn should do the job of diverting the black king. Ultimately it is the usual division of labour.

Now we are going to look at a classic example, featuring a position very similar to the one we have just seen.

Yury Averbakh
Gavriil Veresov
Moscow ch-URS 1947



White to move

White can create a distant passed pawn, but in addition Black has other weaknesses on the kingside and the white king is ideally posted. The result is that White wins easily:

39.♗h3

The bishop immediately seizes the diagonal along which it will penetrate to the heart of the black position. 39.b4! should also win, and even makes counterplay with ...b6-b5 less bothersome, e.g. 39...axb4 40.axb4 b5 41.cxb5 ♗xb5 42.♗xe4+–.

39.♗h3 b5!?

The bishop does not want to relinquish control of the d7-square.

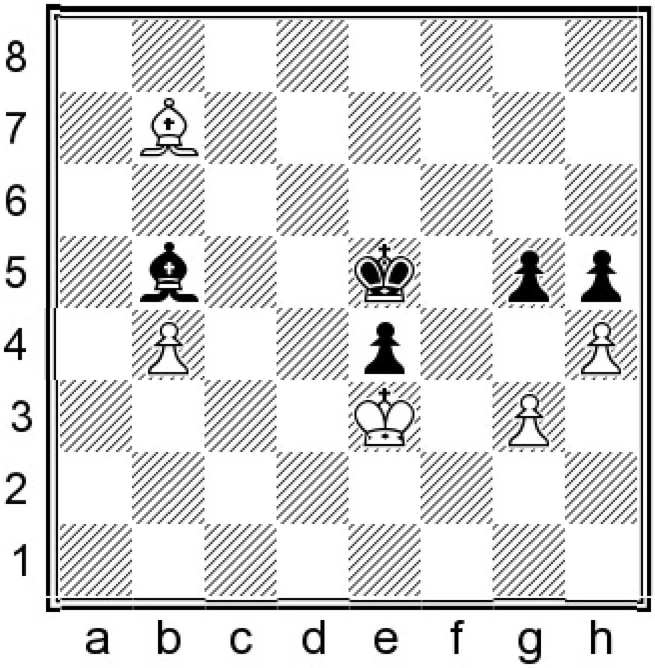
If 39...♗a8 40.♗d7 ♗b7 41.b4 axb4 42.axb4 ♗a8 43.b5! ♗b7 44.♗h3 ♗a8 45.♗c8 zugzwang.

40.cxb5 ♗xb5 41.♗c8 ♗c6 42.b4 axb4 43.axb4

Now we have the distant passed pawn.

43...♗b5 44.♗b7 g5

A natural counterplay attempt, which forces White to be quite accurate. Passive lines do not usually work when the position is not a healthy one and here there are serious weaknesses on g6 and h5, e.g. 44...♗d3 45.♗c6 ♔f5 46.♗d7+ ♔e5 47.b5 ♔d6 48.♗e8+–.



45.♗xe4!

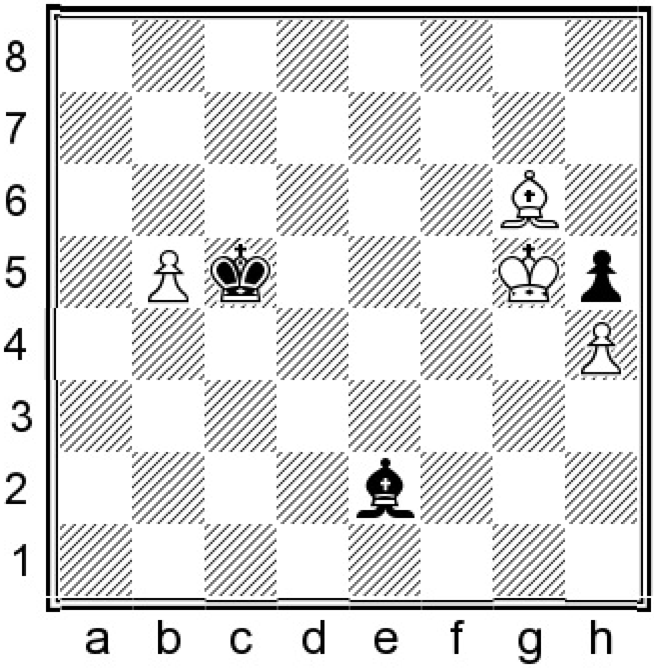
45.hxg5? ♔f5 would have given sufficient counterplay to draw.

45...gxh4 46.gxh4 ♗a4

Or 46...♗e8 47.♗f3 ♔f5 48.♗e2! ♔e5 49.♗d3! ♗d7 50.♗g6 ♗g4 51.b5 ♔d6 52.♔f4 ♔c5 53.♗e8, and White wins in similar fashion to the game.

47.♗g6 ♗d1 48.b5 ♔d5 49.♔f4 ♔c5 50.♔g5 ♗e2!

If 50...♔xb5 51.♗xh5 ♗c2 52.♗e8+ ♔c5 53.h5 ♔d6 54.♔f6! and the ‘wrong rook’s pawn’ queens.



51.♗e8!

A necessary finesse. Before taking the pawn it is essential to wait until the black king moves one square further away. It would have been a terrible mistake to play 51.♗xh5? ♗xb5 52.♗g4 ♗e8 53.♗f5 ♔d6 54.♗g6 ♔e7! and the black king reaches the corner, as even after 55.♗xe8 he can just play 55...♔f8=.

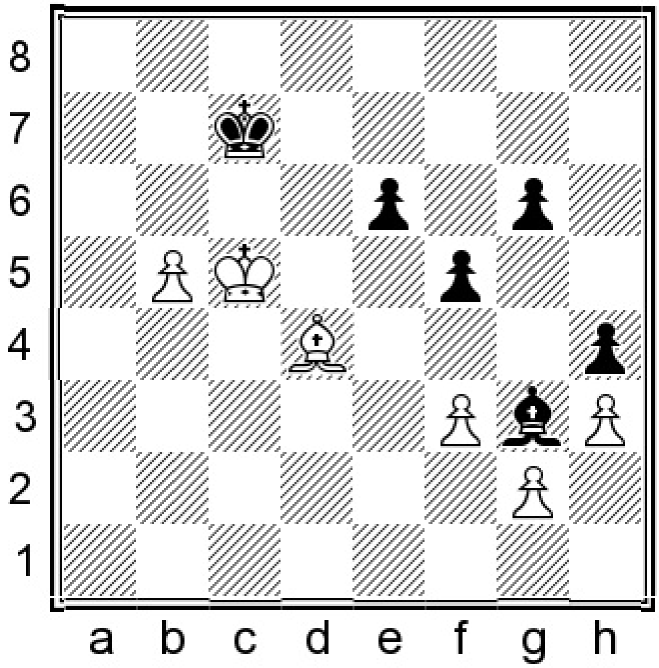
51...♔b6 52.♗xh5!

Now the black king is one tempo short.

52...♗xb5 53.♗g4 ♗e8 54.♗f5 ♔c7 55.♗g6 ♔d8 56.♔f6! 1-0

Now for a position with a second weakness.

Jesus de la Villa 2456
Joachim Thomassen
Cappelle-la-Grande 2008



White to move

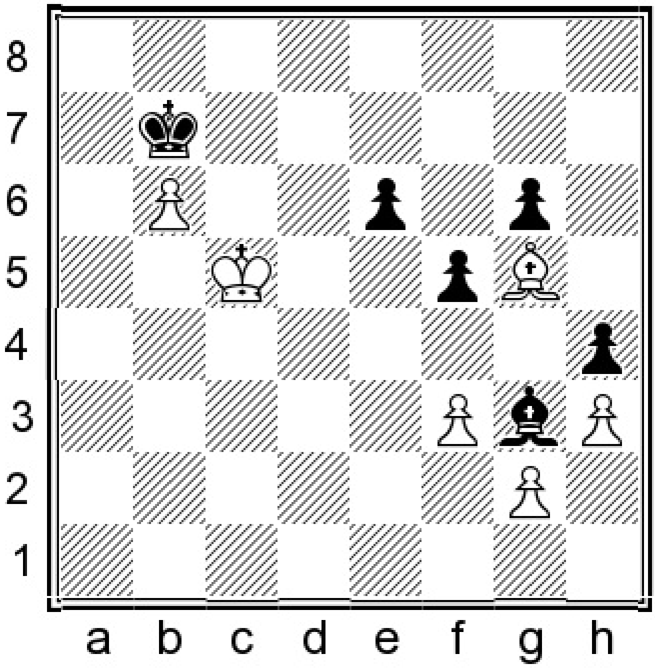
In this new position, White's passed pawn is slightly more distant and there is a weakness on h4, which proves to be decisive. White should have won easily, but failed to do so:

51.b6+ ♔b7

It is natural to place the king in front of the pawn, especially because with so many black pawns controlling the light squares it does not seem easy for the white king to penetrate, but in that case the distant passed pawn strategy is working correctly; the black king is too far away now.

However, after 51...♔d7 52.♔b5 ♗h2 53.b7 ♔c7 54.♔a6, followed by ♗a7, White is winning anyway.

52.♗e3 ♗h2 53.♗g5 ♗g3

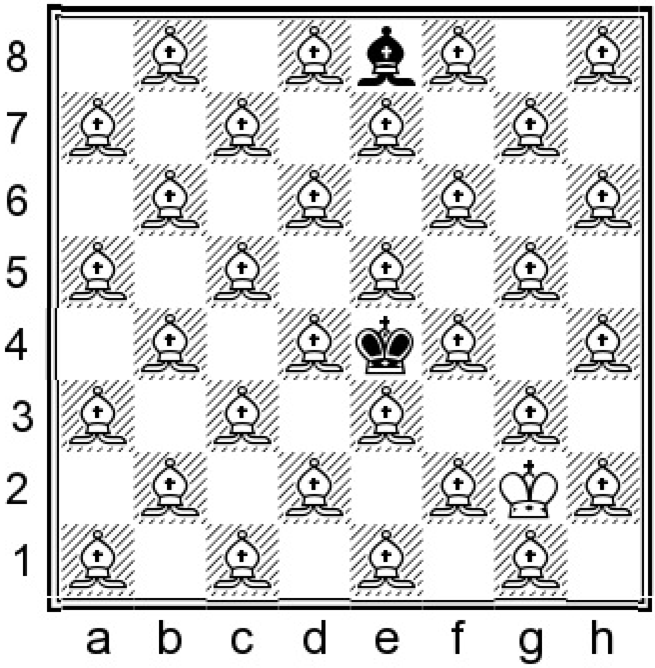


54.♗d8!

Here we diverge from the game. A simple three-move manoeuvre forces zugzwang. After the move played, 54.f4?, the king can enter more easily, but the weakness of the e4-square allows counterplay, perhaps unexpectedly, but nevertheless it was badly calculated. The rest of the game is given without commentary, because it strays a long way from our theme: 54...♗f2+ 55.♔d6 ♔xb6 56.♗d8+ ♔b5 57.♔xe6 ♔c4 58.♔f6 ♔d5 59.♔xg6 ♔e4 60.♗g5 ♗e1 61.♔h5 ♗g3 62.♗xh4 ♔xf4? (62...♗xh4!=) 63.♗d8? ½-½.

54...♔c8 55.♗f6 ♔b7 56.♗g5 Zugzwang. Black either loses the h4-pawn or allows the white king to penetrate.

Chapter 7
Opposite-coloured bishops



Endings with bishops of opposite colours are particularly attractive for a long series of reasons. The first is their enormous reputation for being drawish, which often makes them a desirable escape route in practical games. But there are other, more interesting reasons.

If the ending comes about after the exchange of a major piece (which it most often does), the game up to that point will have had almost opposite characteristics, since the coordination of the bishop with the major pieces strengthens the attack and makes a draw less likely. This makes the decision to exchange that last major piece of huge significance, and in order to make it correctly it is essential to be well acquainted with the finer points of such endgames. In this regard, the number of wrong decisions made is huge, and almost all players are guilty, whatever their playing level. As evidence of this, in this chapter we shall show some positions at the moment when the decision to exchange was taken.

There is yet another aspect which makes these endings attractive: opposite-coloured bishops endings seem to have a special logic of their own, with many paradoxical ideas; this allows great scope for imbalance, which some players have exploited masterfully. I advise the reader to study the diagram at the start of this chapter, if he has never seen it before; certainly not because it is likely to occur in any of your games, but for the simple pleasure of discovery. What do you think is the correct result? And what if we removed a white bishop?

We are not going to list each of these paradoxical situations. I think it will be better to discover them as we go through the examples, but we shall make a factual summary at the end of some of the groups of patterns.

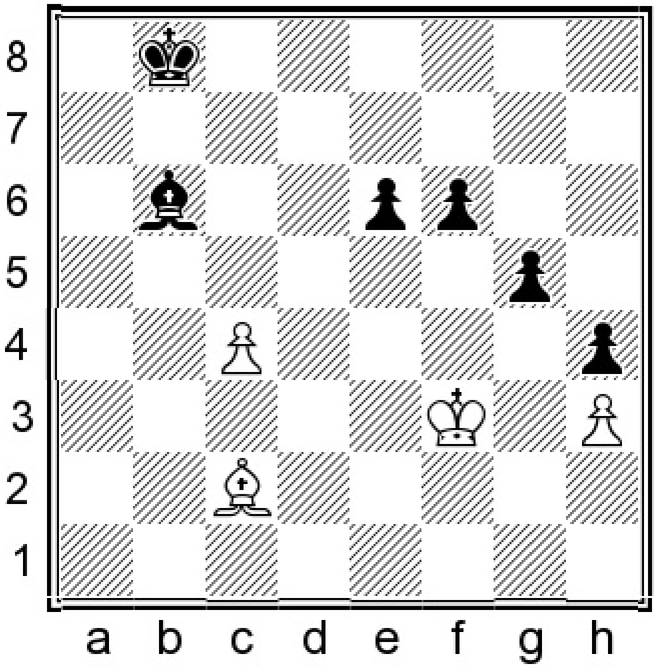
And of course all these paradoxical patterns are an inevitable result of the way these pieces move and of the special circumstance of their never being able to confront each other (which all the other pieces can do).

Pattern 39 The blockade

The most important element in this type of endings is *the blockade*, which reduces the value of passed pawns in comparison with other endings. This is because the squares that the blockading bishop controls cannot be attacked by the bishop belonging to the side with the passed pawns. Here the colour aspect is vital. If the passed pawns can be forced to move onto squares of the same colour as their own bishop, it is easily possible to prevent two pawns from advancing, and often, as we shall see, more than two pawns.

In the following position, composed by Mark Dvoretsky, we encounter two important themes: the *useless pawn* which we shall study in **Pattern 46**, and above all the blockade.

Mark Dvoretsky
2003



White to move

To be able to blockade the four black pawns it is absolutely essential (!) to force the e6-pawn to advance to e5, so that none of the four pawns control any light squares. On the other hand, White’s c-pawn is useless.

Seen in that light, the right move appears as if automatically:

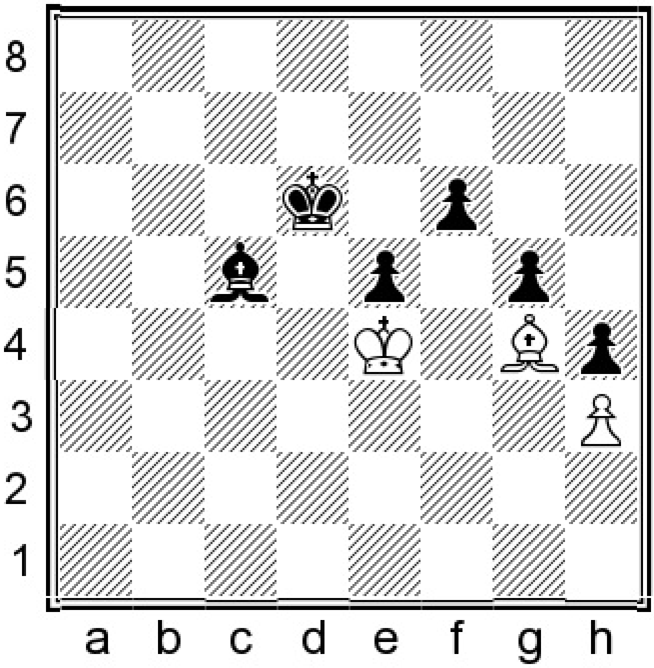
1.c5!!

Not 1.♗h7? ♔c7 and once the king is able to defend the pawn on e6, Black should win.

1.c5!! ♗xc5 2.♗b3 e5

After this move, which is forced, so as not to lose the pawn, the three white pieces coordinate perfectly to prevent the advance of the great mass of black pawns.

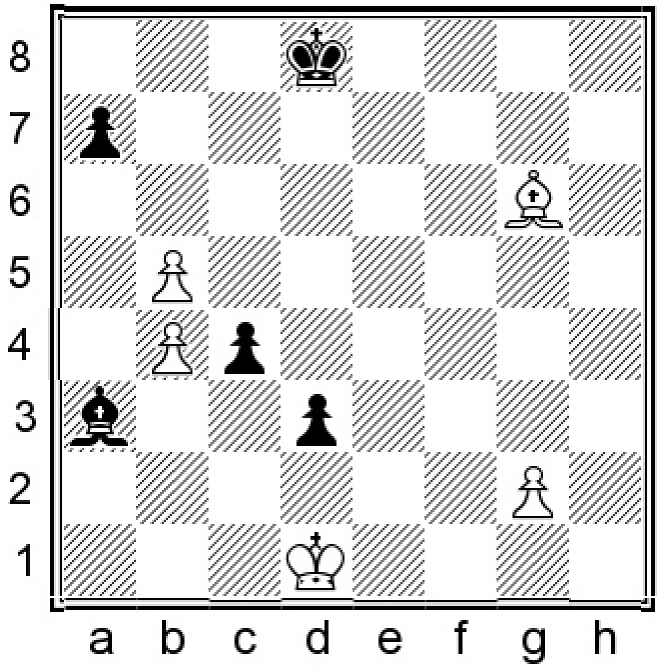
3.♗e6 ♔c7 4.♔e4 ♔d6 5.♗g4



And it is a draw. Despite the big advantage in material, there is no way for Black to break the blockade.

A further example, from which I can conclude that I did not understand the pattern.

Jesus De la Villa
Miles Ardaman
Linares 1987



White to move

Once again Black has pawns on squares of the ‘right’ colour and we need to force them to advance. The blockade must be put in place before the arrival of the opposing king. In this position I showed that I was unsure about these concepts:

44.g4?

The use of one’s own passed pawns to divert the opponent’s pieces is a possible strategy in these endings, but it does not work this case. The reason is that it is necessary to make a lot of moves in order for the pawn to create real counterplay, whereas Black can stop the pawn with minimal effort.

The correct move was 44.♔d2!. Black’s pawns are on light squares but his king is very distant and it is possible to force them to advance onto dark squares – not, however, by directly attacking them with the bishop. First White needs to bring the king alongside them: 44...♗xb4+ 45.♔e3 ♔e7 46.♔d4! d2 47.♗c2 c3 and the pawns are perfectly blockaded. Now any move which maintains the blockade is sufficient, e.g. 48.g4=.

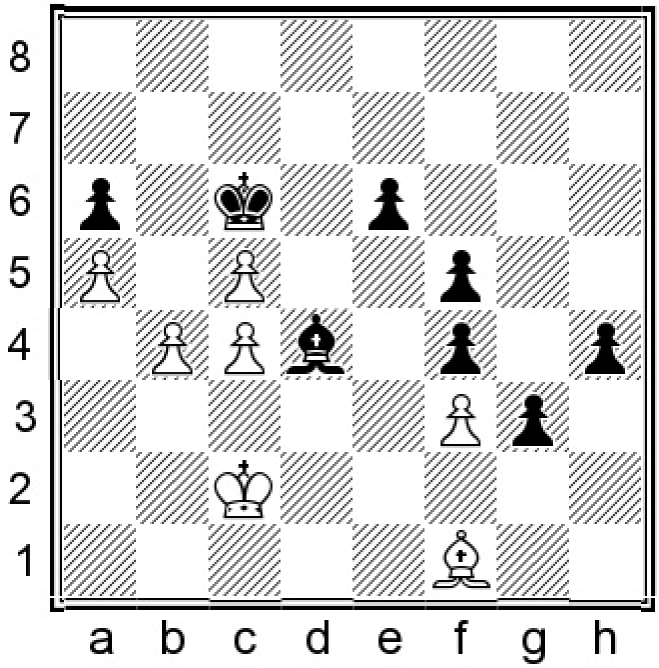
If 44.♗f7? c3 and now the need to watch over the c2-square ties down both white pieces and allows Black’s king total freedom: 45.♗b3 ♔e7 46.g4 ♔f6 47.♗a4 ♔g5 48.♗b3 ♔xg4 49.♗a4 ♔f4–+.

44.g4? ♗xb4 45.g5 ♔e7 46.♗f5 ♔d6 0-1

The black king arrives to defend the passed pawns and then their advance is easy.

Now we shall see a supreme example of blockade, taken from a practical game.

Joaquin Scarpa 2260
Diego Herman 2120



White to move

White’s majority is very big (four pawns vs one), but attackable, and if he plays b4-b5, the c5-pawn falls, which would make the majority harmless. We could describe the black majority as outrageous (five pawns against one!). The outcome of the game is unexpected, to say the least.

37.b5+!

White could have delayed this move, but the concept is the same. He needs to be prepared to exchange all four of his pawns for the black pawn!

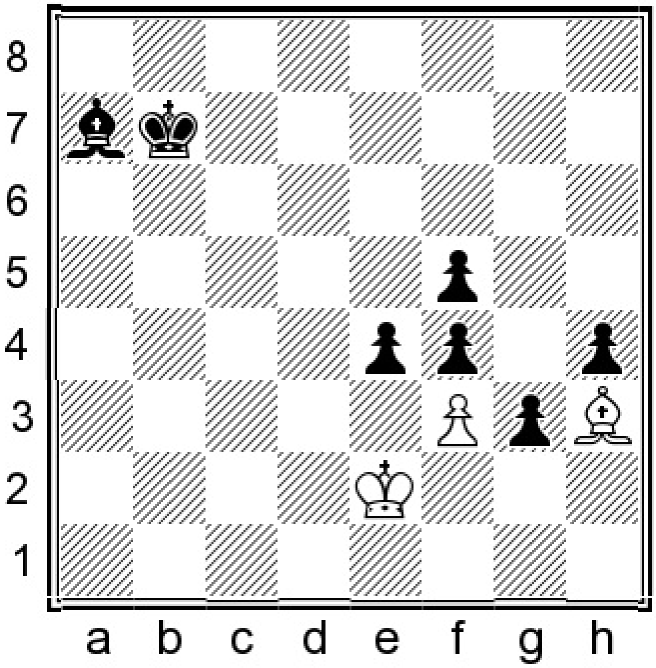
37...♔xc5 38.bxa6 ♔b4!

Black has quite a lot of work to do but he will finally eliminate all the white queenside pawns or else leave one harmless pawn and then he will be able to focus on the kingside.

39.c5 ♗xc5 40.♔d2 ♗a7 41.♔d1 ♔c3 42.♔e2 e5 43.♗h3 e4 44.♗g2 ♔b4

Black busies himself with eliminating all the white queenside pawns. It makes no difference, but it is going to present us with a striking picture.

45.♗h3 ♔xa5 46.♗f1 ♔xa6 47.♗h3 ♔b7



Tremendous. Five quite healthy pawns against one! White cannot regain a pawn, either on f5 or e4. However, by keeping the bishop on the squares f1, g2 and h3 and his king on e2 he is able to maintain an indestructible fortress.

48.♗f1

Not 48.♗xf5? g2 and the pawn queens; or 48.♗g2 ♔c7 49.fxe4? fxe4 50.♗xe4 h3, followed by 51...g2.

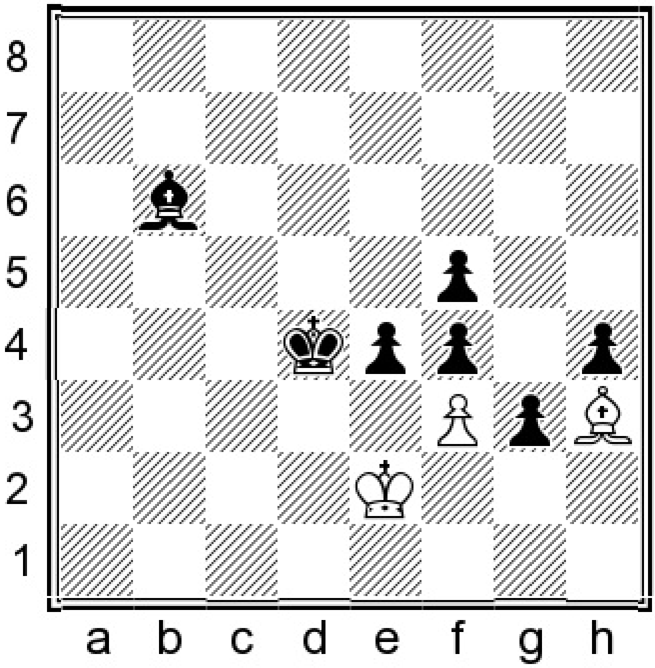
48...♔c7 49.♗h3 ♔d6 50.♗g2 ♔e5 51.♗h3 ♔f6 52.♗g2 ♔g5

The king tries on this side.

53.♗h3 ♗b6 54.♗g2 ♔f6

If 54...h3 55.♗xh3 ♔h4 56.♗g2! and the black king still cannot penetrate.

55.♗h3 ♔e5 56.♗g2 ♔d4 57.♗h3



57...♔c3

Now he tries on the other side, but there is nothing to be done.

58.♗g2 ♔c2 59.♗h3 ½-½

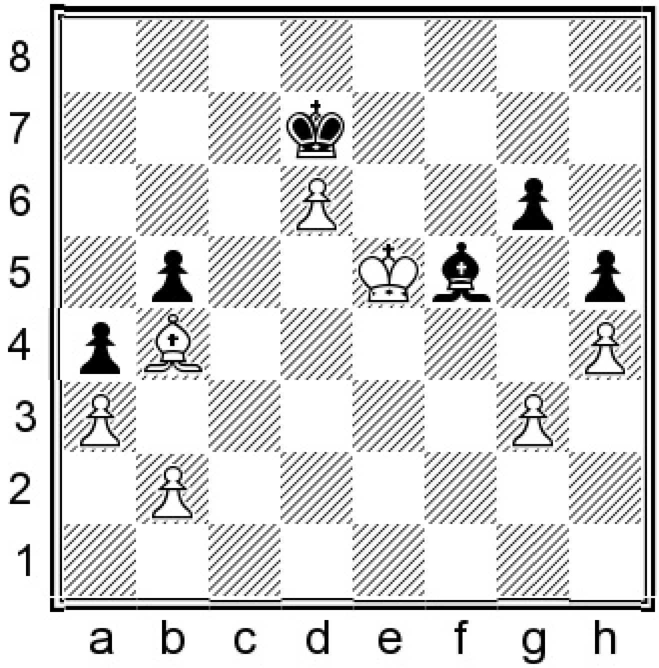
Some players prefer to sacrifice a lot of pieces, but I think that Joaquin Scarpa has his own immortal game already.

Pattern 40 The fortress

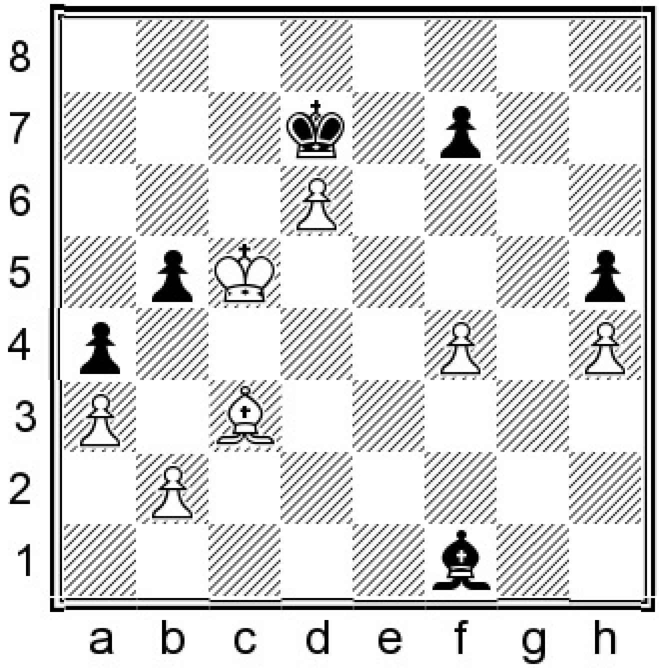
The fortress is a resource in all types of endings. In endings with opposite-coloured bishops it acquires enormous importance.

Once we have studied the concept of blockade, we can understand the two defensive basic systems already indicated by Averbakh in the 1950s: the *fortress defence* and the *zonal defence*.

We shall apply the term 'fortress defence' to the following scheme: the king stops the passed pawn (or pawns) while the bishop defends the remaining pawns, naturally placed on squares of the same colour as the defender's bishop. This is a pattern in which it is favourable to place one's own pawns on squares of the same colour as one's bishop, contrary to the famous, but not universal, theory of the bad bishop.



Position 1



Position 2

The two positions above can be reached in analysis of the game Averbakh-Liublinsky, Moscow 1950, which Averbakh won with ease. He includes the first position in his book as an example of a fortress, and the second is also a fortress. Basic analysis allows us to verify this.

For the first position:

1.♔d5 ♝d3 2.♔c5 ♝c4 3.♗c3

Instead, 3.b3 does not create any problems, since the fortress cannot be breached after either of the two captures.

3...♗e2 4.♗e5 ♗c4?!

We shall analyse this move, which is to some extent inaccurate, in order to experience the transformation of one fortress into another.

5.b3 ♗xb3!

Now 5...axb3?! 6.a4 ♗d3 might create some problems.

6.♔xb5 ♗c2

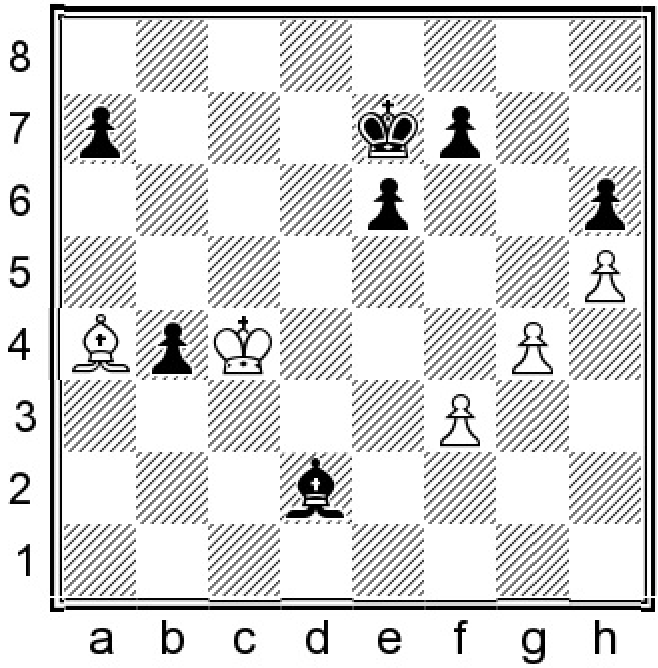
We have reached a new, clearer, fortress.

For the second position, with fewer details:

1.♔d5 ♗d3 2.♔e5 ♗e2 3.♗b4 ♗d3 4.♔f6 ♗c4 5.♔g5 ♗e2=

It is quite common for a winning position to be transformed into a fortress following an oversight caused by overconfidence. And when you are two pawns up it is easier to make this mistake.

Bjorn Thorfinnsson 2402
Miguel Illescas 2609
Halkidiki 2011 (1)



Black to move

Black, who was winning, has played the last few moves carelessly and is now faced with a possible fortress. But it is not yet an obvious one and we need to notice a few details. First, the white king (with some slight support of the bishop, from a distance) takes care of stopping the two queenside pawns. The bishop will have to defend the three kingside pawns, defending the base (f3) and preventing the possible pawn breaks from creating a passed pawn. The only pawn breaks are ...e5-e4 and ...f7-f5; we shall see how to be alert to these at all times.

39...♔d6

The immediate 39...f5 allows the creation of a simple fortress, but the bishop must be ready to position itself on the ideal square g6: 40.gxf5 exf5 41.♔b3 ♔f6 42.♗e8 ♔g5 43.♗g6 ♔f4 44.♔a4=.

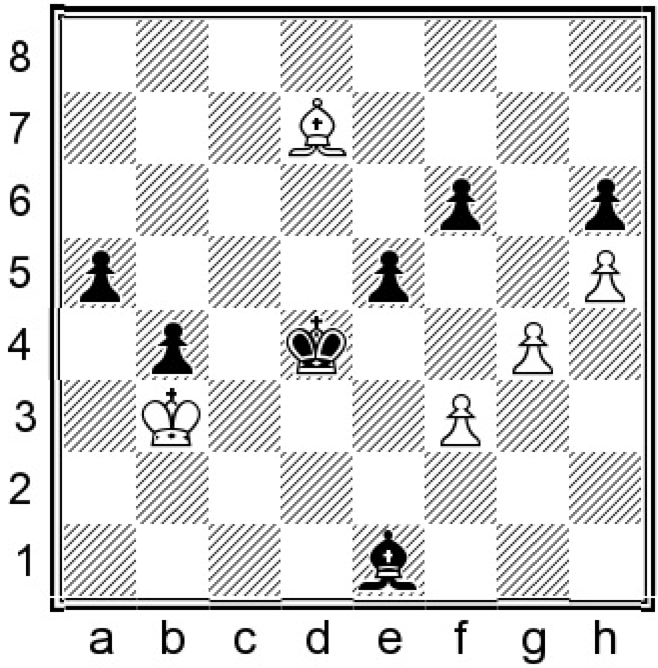
39...♔d6 40.♗e8!

Not the only move, but it is almost always useful to target one of the enemy pawns, in order to make it move onto the colour where it can be easily blockaded.

40...f6 41.♗a4

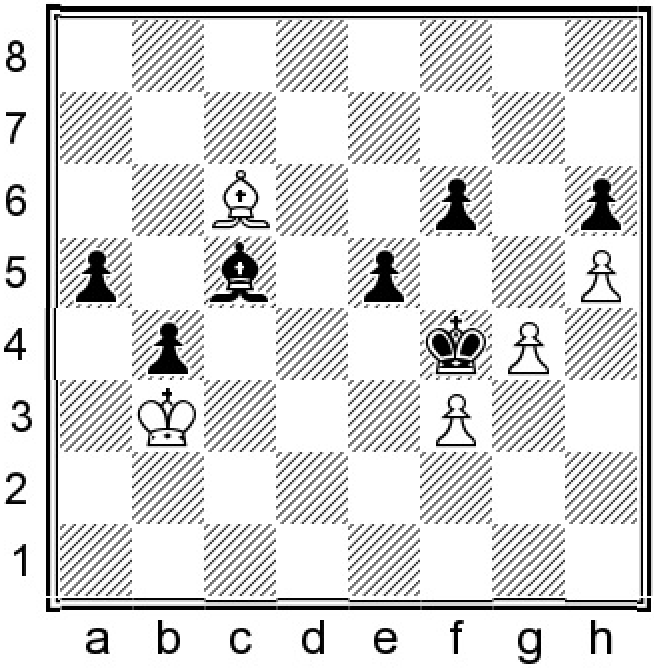
Here, 41.♗f7! ♔e7 42.♗g8 was the quickest way to make the pawns advance.

41...♔e5 42.♗d7 a5 43.♔d3 ♗c3 44.♔c4 ♗e1 45.♔b3 ♔d5 46.♗e8 ♔d4 47.♗d7 e5



Finally this fixed structure has been established. Now White only needs to be concerned that the ...f6-f5 break may cause the loss of the pawn on f3 or the one on h5. This can only happen with the white bishop on e4.

48.♗c6 ♗f2 49.♗d7 ♔d3 50.♗b5+ ♔d2 51.♗c6 ♗c5 52.♗d7 ♔d3 53.♗b5+ ♔e3 54.♗c6 ♔f4



Watch out now. This is the only tricky moment.

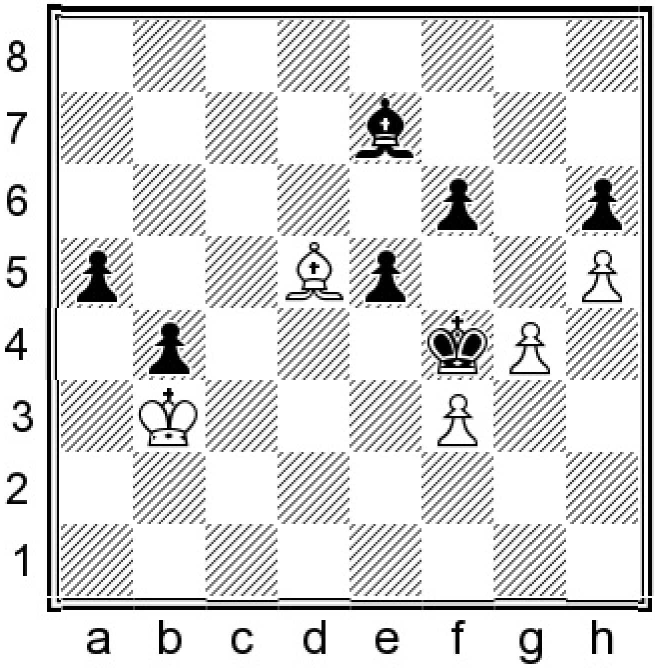
55.♗d5

The obvious 55.♗e4? would complicate matters. After 55...f5! 56.gxf5 (56.♗xf5 ♔xf3–+) 56...♔g5 the h5-pawn falls, after which Black gets passed pawns on both wings.

55...♗f8

Now 55...f5 is harmless after 56.gxf5 ♔g5 57.♗f7=. Black now waited for 22 moves before trying this, with just a small and irrelevant difference in the position of his bishop:

56.♗c6 ♔g3 57.♗d5 ♔h4 58.♗e6 ♔g5 59.♗d7 ♗d6 60.♗e6 ♔f4 61.♗d5 ♗e7 62.♗c6 ♔g5 63.♗d7 ♗d8 64.♗e6 ♔f4 65.♗d5 ♔e3 66.♗c6 ♔d4 67.♗d7 ♗e7 68.♗c6 ♔c5 69.♗e8 ♔d6 70.♗f7 ♗d8 71.♗e8 ♔e6 72.♗g6 ♗e7 73.♗h7 ♔d5 74.♗f5 ♔d4 75.♗d7 ♔e3 76.♗c6 ♔f4 77.♗d5



77...f5!?

The only try.

78.gxf5 ♗f6

Inviting White to defend all his pawns, but White is not ‘biting’.

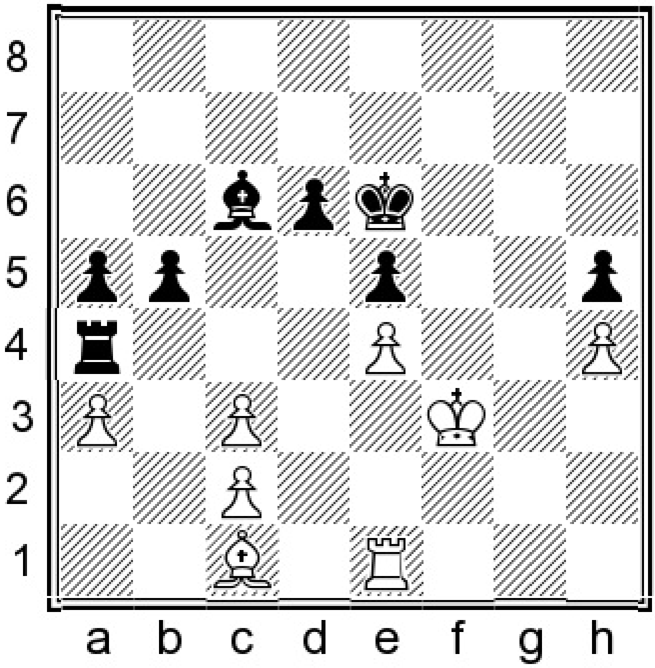
79.♔a4!

Ignoring the f5-pawn.

79...♔g5 80.♗f7! ♔h4 81.♔b3 ♔g3 82.♗d5 ♔h4 ½-½

As we already indicated in the introduction to this section, the exchange of the last major piece is a very common mistake in the transition to endings with bishops of opposite colour.

Alexander Beliavsky 2585
Viktor Kupreichik 2475
Minsk ch-URS 1987



Black to move

White is cramped, due to his horrible structure, but the opposite-coloured bishops provide hope.

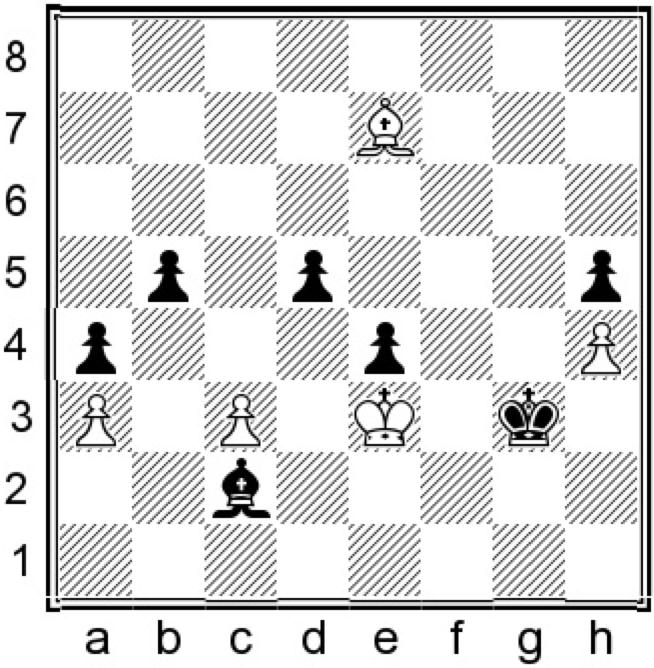
33...♖xe4?

A very typical mistake, to which we referred in the introduction to this chapter. Black exchanges rooks to win material, but lands in a fortress position. Instead, 33...d5! would have made White suffer more.

33...♖xe4? 34.♖xe4 ♔f5 35.♔e2! ♗xe4 36.♔d1 ♗f3+ 37.♔e1 ♔g4 38.♗g5 d5 39.♔d2 ♗e4 40.♗f6 ♗g6 41.♗d8 a4 42.♗f6 ♗e4 43.♗e7= ♗g2 44.♔e2 ♗h3 45.♗f6 ♔f4 46.♗g5+ ♔g3 47.♗f6 e4 48.♔e3 ♗f1 49.♗e7 ♗c4 50.♗f6 ♗a2 51.♗e7 ♗b1 52.♗f6!?

52.♔d2 was possible, but the move in the game allows us to see a symmetrical fortress of great flexibility.

52...♗xc2 53.♗e7



The white king controls the only passed pawn and the bishop can defend the pawns on either wing, even though the black king can infiltrate. Black tries every possibility but White, with only minimal care, neutralises every attempt.

53...♗d3 54.♗f6 ♔g2

The black king starts ‘the great detour manoeuvre’, but in this case it fails to achieve anything.

55.♗e7 ♔f1 56.♗f8 ♔e1 57.♗e7 ♔d1 58.♗b4 ♔c2 59.♗a5 ♔b3

The manoeuvre is completed, but the pawns are defended.

60.♗b4 ♔c4 61.♗a5 ♗f1 62.♗b4 ♗h3 63.♗a5 ♔b3 64.♗b4 ♗f1 65.♔d2 ♗c4 66.♔e3 ♔c2

Curiously, the king departs.

67.♗a5 ♔d1 68.♗b4 ♔e1 69.♗e7 ♔f1 70.♗f6 ♔g2 71.♗e7 ♔g3 72.♗f6 ♗f1 73.♗e7 ♗h3 74.♗f6 ♗d7 75.♗e7 ♗c6 76.♗f6 ♔g4 77.♗e7 ♔f5 78.♗d8 ♗b7 79.♗c7 ♔g4 80.♗d8 ♔g3 81.♗e7 d4+

The last attempt.

82.♔xd4!

The simplest; the bishop and the king can both control the e3-square at the same time. Instead, 82.cxd4 ♗d5 83.♔e2! (the only move) 83...b4 84.♗b4! ♔h4 85.♔e3 ♔g4 86.♗d6 would have allowed White to employ a zonal defence and keep the game within the drawing margin.

82...♔f2 83.♗g5 ♔f3 84.♗h6 ♔e2 85.♗g5 ♔e1 86.♗e7! ♔d2 87.♗g5+ ♔d1 88.♗e7 ♔c2 89.♗f8

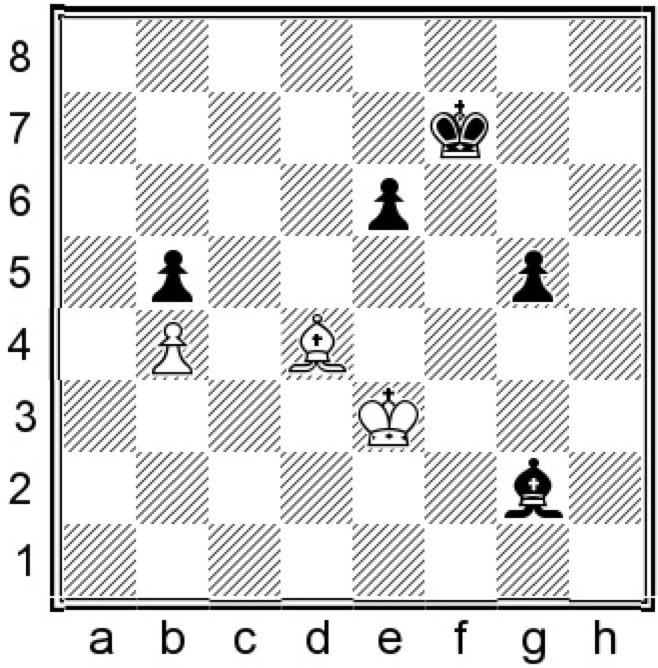
Draw.

Pattern 41 Zonal defence

As we already mentioned in the previous section, an alternative defensive system to the *fortress defence* is the *zonal defence*. In some positions, both are possible, and in others only one of them is. The zonal defence essentially consists of the bishop and king working together to stop passed pawns and at the same time to prevent the enemy king from getting through. It works, and very well too, with pawns which are not connected but close to each other, separated by just one or two files. It does not usually work when the pawns are separated by three files, but occasionally it does. We shall come back to this again in the conclusions. The most familiar characteristic is the position where the kings are a knight's move away from each other, which, combined with the coordinated action with the bishop, prevents the enemy king from advancing.

First, an example from a game played at the highest level.

Vladimir Kramnik 2770
Garry Kasparov 2849
London WCh 2000 (m/8)



White to move

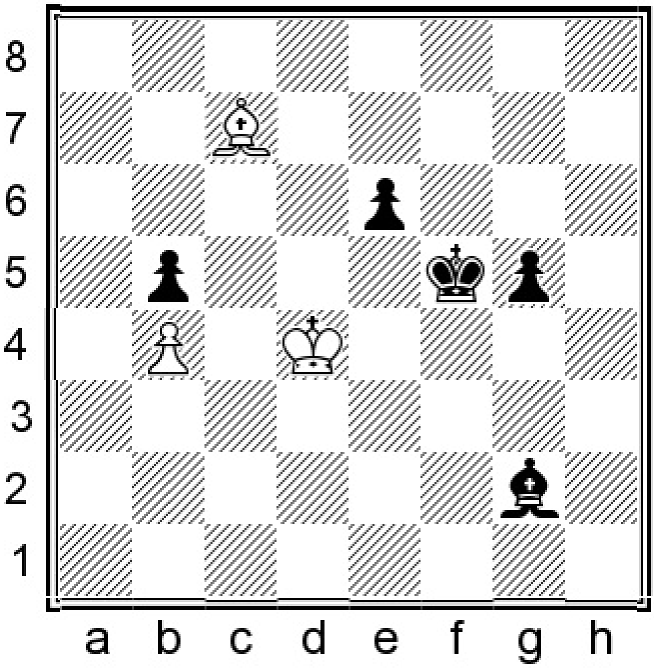
38.♗e5!

After this move, Kasparov, who had just exchanged rooks in order to win a second pawn, joined the dots and realised that the position was a draw, despite the two extra pawns. As our analyses will show, White easily maintains the zonal defence:

38...♔g6

The king is unable to penetrate on the other wing either: 38...♔e7 39.♔d4 ♔d7 40.♗g3 ♔c6 41.♗e5=.

39.♔d4 ♔f5 40.♗c7



All the while, the kings stand a knight's move away from each other and the defending pieces cover a triangle of squares which are impenetrable: the e4-, e5- and f4-squares.

40...♔g4 41.♔e3!

Both kings manoeuvre, but they maintain their relative position and the triangle of forbidden squares moves with them. Now these are f3, f4 and g3.

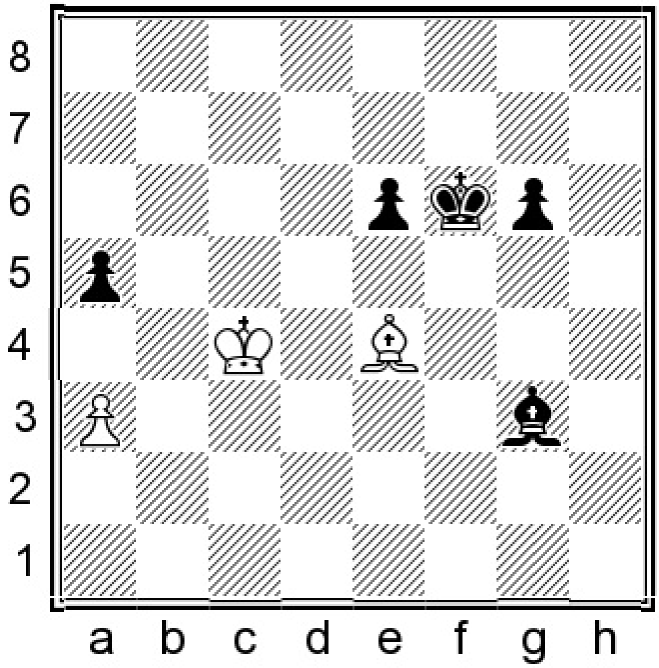
41...♗d5 42.♗e5 ♔h3 43.♔f2!

It is typical of the zonal defence that the stronger side's king comes up against the edge of the board. Now the triangle of forbidden squares consists of h2, g2 and g3. The black king is unable to advance further and advancing the pawns changes nothing.

43...♔g4 44.♔e3 ♔f5 45.♔d4=

Here is a further example with pawns one file apart.

Joel Lautier 2675
Emil Sutovsky 2660
Moscow 2002 (5)



White to move

We have a position very similar to the Kramnik-Kasparov game, where there is more room for the black king to approach the a-pawn, but once again the zonal defence holds.

It is worth noting that two extra pawns, if very close together, rarely manage to win in an ending of opposite-coloured bishops.

45.a4! g5 46.♔d3 ♔e5 47.♗b7

The king and bishop share the roles of defending the zone perfectly.

47...♔f4 48.♗c6 ♗e1 49.♗b7 ♗b4 50.♗c6 ♗c5 51.♗b7 ♗a7 52.♗c6 ♗b6 53.♗b7 g4 54.♗c6 ♗a7 55.♗b7 ♗b6 56.♗c6 ♔e5 57.♗g2 ♔d6 58.♔c4!

Although he could have waited, White should maintain the zonal defence, because the exchange of the e-pawn for the one on a4 would produce two distant passed pawns, which win, as we shall see in the next section.

58...♗d8 59.♗h1 ♔e5 60.♔d3 ♔f4 61.♗b7 ♔g3

Threatening 62...♔f2.

62.♔e2! ♔h2

This threatens 63...♔g1 and we must suppose that in the tumult of a rapid game both White and Black momentarily forgot the essential target.

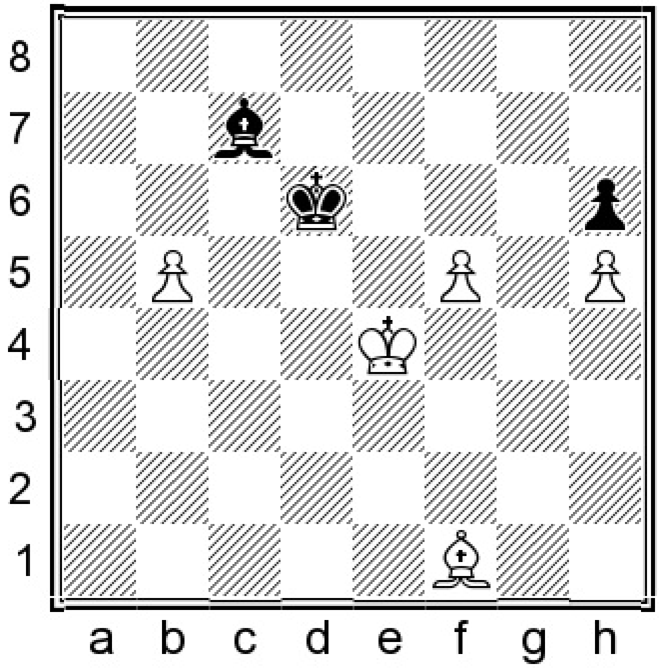
63.♗c6??

63.♔f1!.

63...♗b6?? 64.♔f1 ♔g3 65.♔e2 ♔f4 66.♗b7 ♔e5 67.♔d3 ♗d8 68.♗a8 ♔f6 69.♗b7 ♔g5 70.♗c6 ♔h4 71.♔e2 e5 72.♗b7 ♗b6 73.♗c6 ♔h3 74.♗b7 g3 75.♔f1 ♔g4 76.♔e2 ♔f4 77.♔d3 ♔f5 78.♗c6 ♔e6 79.♗e4 ♔f6 80.♗c6 ♔f5 81.♗b7 ♔f4 ½-½

In the following example, which was an important game in the Buenos Aires Olympiad, we see an exceptional case where the zonal defence works with pawns separated by three files.

Istvan Csom 2510
Rafael Vaganian 2570
Buenos Aires ol 1978 (6)

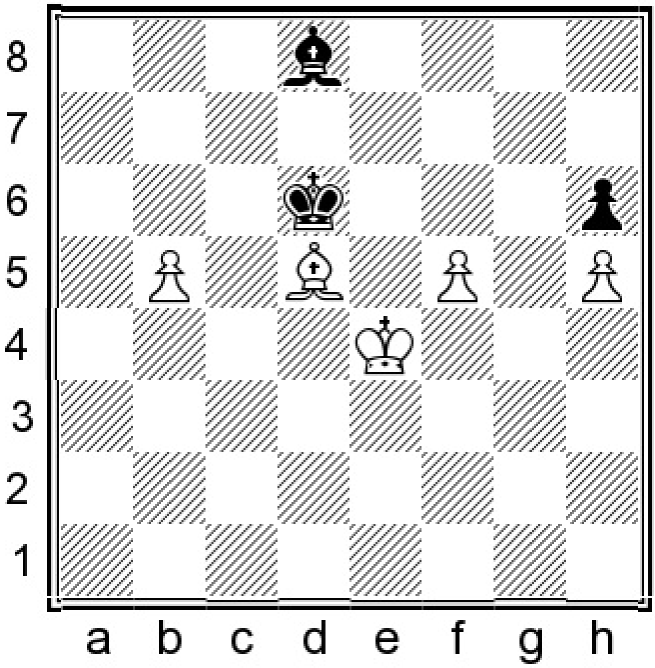


White to move

Without the h-pawns, the position is theoretically winning for White. It is one of the few cases in which the presence of more pawns favours the defender. The reason is that the pawns prevent the white king from infiltrating to the right of the pawns.

53.♗h3?

Here White loses his big chance to win with 53.♗c4! ♗d8 54.♗d5!, when we reach an extraordinary position of reciprocal zugzwang.



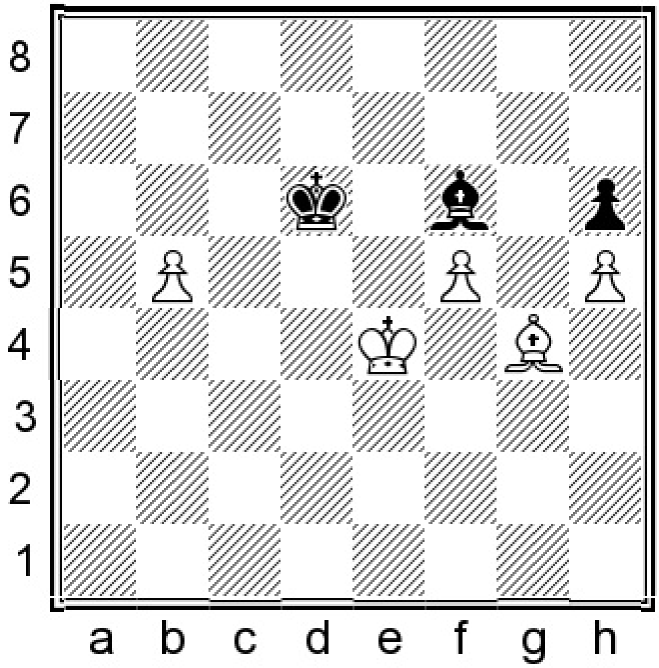
analysis diagram

For example, if 54...♗e7 then 55.b6+–, or 54...♔c5 55.♔e5!+–. But if White had to move, it turns out that there is no good square for the bishop and Black would have time to set up his basic defensive position with the bishop on f6 and the king on c5 or d6.

53.♗h3? ♗d8 54.♗g4

If White tries to return to the winning position, Black places his bishop on a better diagonal: 54.♗f1 ♗f6! 55.♗c4 ♗g7 56.♗d5 ♔c5 57.♗c6 ♗f6 and there is no zugzwang.

54...♗f6



There is no way for the white king to get through the centre or on the right. So White tries to breach the defence by sacrificing the b-pawn, but the black king gets back in time:

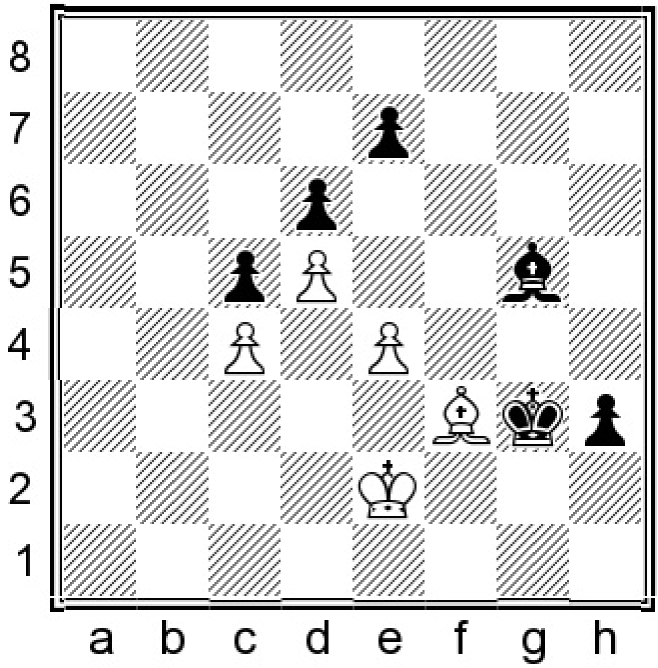
55.b6 ♔c6 56.b7 ♔xb7 57.♔d5 ♔c7 58.♔e6 ♗c3 59.f6 ♔d8! 60.f7!?

60.♔f7!? ♗d4 61.♗d1 ♗c3 62.♗a4 ♗d4 63.♔g6 ♗c3! (if 63...♗e3?, 64.f7! is winning) 64.f7 ♔e7=.

60...♗b4 61.♗e2 ♗a3 62.♗c4 ♗b4 63.♔f6 ♗c3+!

Preventing the white king from reaching g7 – it is a draw.

Mikhail Steinberg
Mark Dvoretsky
Minsk 1965



White to move

After a most interesting endgame, deeply analysed by Dvoretsky in his book *Secrets of Chess Training*, White is in zugzwang, because his bishop does not have enough squares to lose a tempo. His only resource is a brilliant zonal defence:

18.e5!

Providing the bishop with another square, at the cost of giving up a useless pawn. 18.♗h1? allows the black king to gain the decisive tempo needed to breach the zonal defence: 18...♔h2 19.♗f3 ♔g1–+.

18.e5! dxe5 19.♗e4 ♔f4 20.♔d3 ♗f6

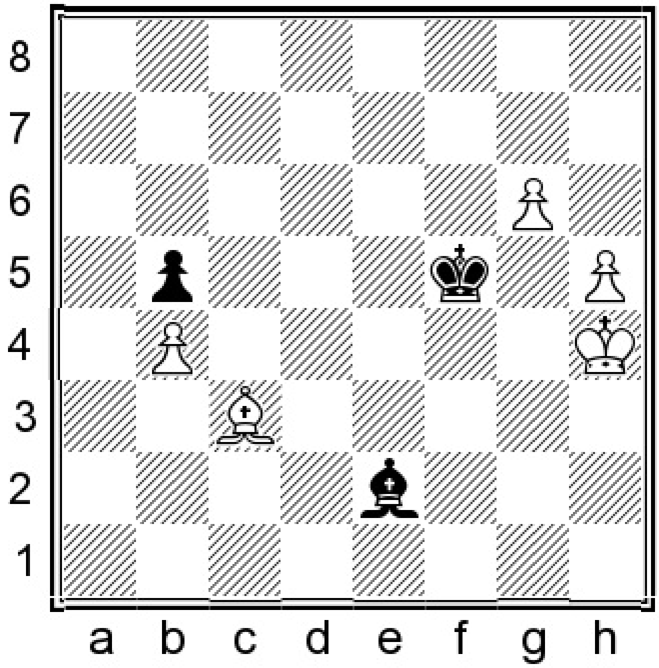
And once again the white bishop has been left without any squares. But there remains another resource, similar to the previous one, but more striking because of the increase in White's material disadvantage:

21.d6! exd6 22.♗d5

This marks the start of the classic and nearly always elementary zonal defence.

22...♔g3 23.♔e2 ♔h2 24.♔f1 ½-½

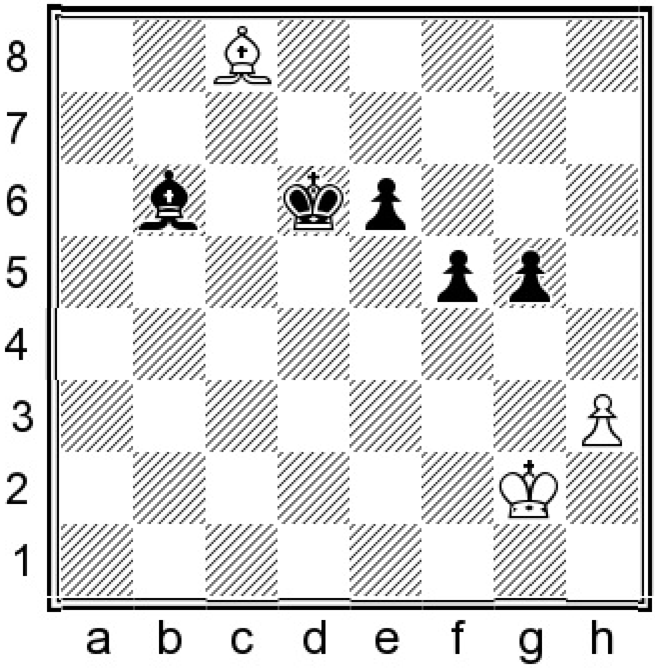
Pattern 42 Lateral control



Again we encounter a theme that could well be studied in theoretical bishop + two pawns vs bishop endings. However, with this material relationship, the frontal defence, based on the sacrifice of the bishop, is the one studied almost exclusively, and this method does not work when there is another pawn on the board. Consequently, this way of stopping pawns, *lateral defence*, is less well known, and in cases where it is necessary to apply it, errors occur. As a rule, it works best against wing pawns, but it can also be useful in some other positions.

First of all, we shall study a position, the previous moves of which we shall see in **Pattern 46**: The useless pawn.

Manfred Schöneberg
Bodo Starck
Weimar ch-GDR 1968 (15; analysis)



White to move

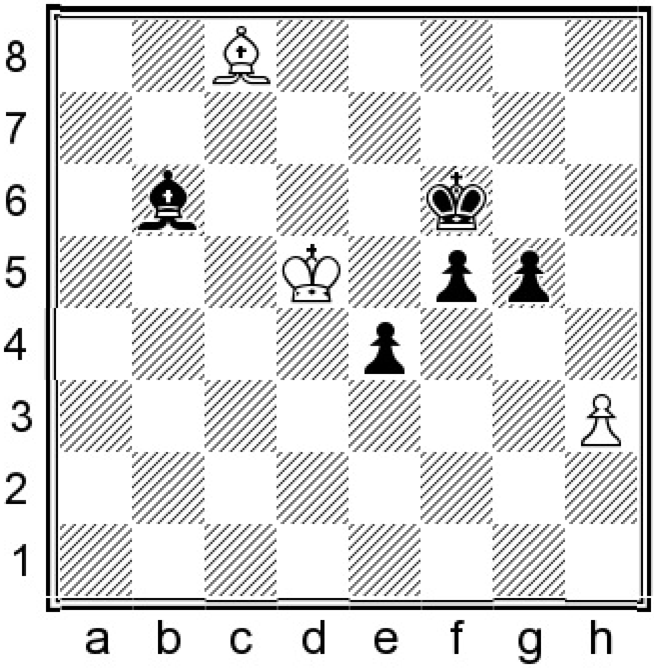
Black threatens first to advance his e-pawn to the e4-square and then his f-pawn to f3. The defensive system of sacrificing the bishop for the two pawns does not work here, because there will still be one black pawn left. Fortunately for White, the black king needs to go to f6 to be able to advance his pawns and the white king, at present very distant, has time to station itself in the appropriate position to exercise *lateral control*:

59.♔f3 ♔e5 60.♔e2!

Preparing to exert lateral control. All other moves lose, e.g. 60.♗d7 ♔f6 61.♗a4 e5 62.♗c2 e4+ and White is unable to sacrifice the bishop.

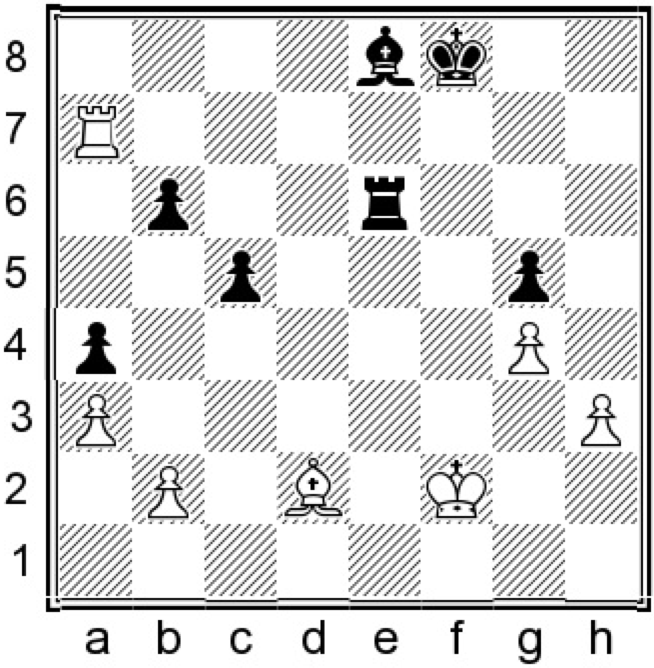
60...♔f6 61.♔d3 e5 62.♔c4 e4 63.♔d5

This is the picture.



White has completed the transfer of his king to achieve lateral control of the pawns, which is necessary in this case, since the sacrifice of the bishop for two pawns loses. Now the king attacks the e4-pawn and prevents the move 63...f4, while if 63...e3 then 64.♗a6, with the classic blockade.

Alexander Fishbein 2490
Igor Zaitsev 2390
Moscow 1989 (2)



Black to move

Material is equal, but the white pieces are much more active. The black position is very delicate.

However, Black finds an excellent defence in the exchange of rooks, because he has anticipated that his king and bishop are going to cooperate to stop White's two kingside pawns, using lateral control:

46...♖e7! 47.♖xe7 ♔xe7 48.♗xg5+ ♔e6

Of course this is not the only move. The black king waits, ready to position itself on f5 or f4 when the pawns advance. It would not be unusual to misinterpret the theoretical positions and play the wrong plan, e.g. 48...♔f7 49.h4 ♔g7 50.♗d2 ♔h7 51.♔g3 ♗f7? 52.h5 ♗e8 53.♔h4 ♗f7 54.g5, and since Black must lose his bishop for the two pawns, he will lose the game.

49.♗d2 ♗g6 50.h4 ♗c2 51.♗e3 ♗d1 52.♔g3 ♔e5 53.h5 ♔e6 54.♔h4 ♗e2 55.♔g5

If 55.g5 ♗d1 56.g6 ♔f5 or 56...♔f6 (attacking the g-pawn and preventing 57.h6) draws.

55...♔f7 56.♔f5 ♗d3+ 57.♔e5 ♗e2 58.♔f4 ♔e6 59.♗f2 ♗d1 60.♗g1 ♗e2 61.♔g5 ♔f7 62.♗h2 ♗d1 63.♗c7 b5 64.♗d6 b4

Black has a clear grasp of events and simplifies on the queenside, even though it loses a pawn. 64...c4 does not lose either.

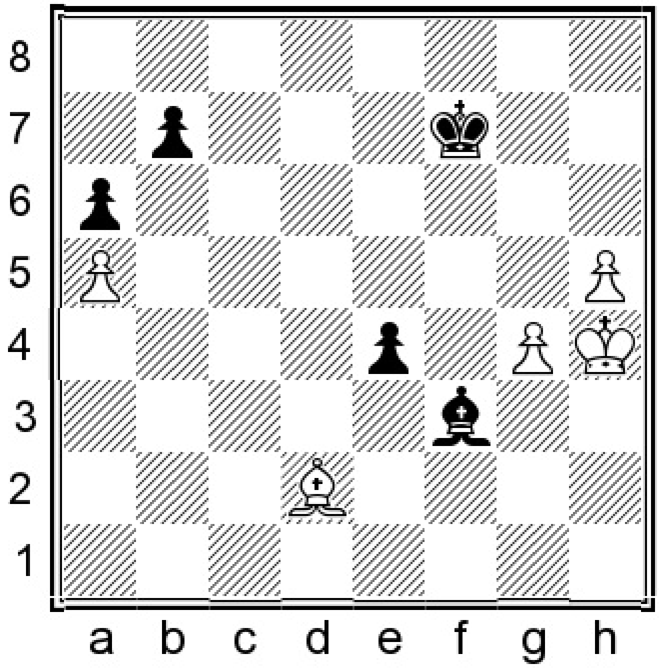
65.♗xc5 bxa3 66.♗xa3

In order not to be left with the 'wrong rook's pawn'.

66...♗e2

And White gave up his attempts. The key lies in the following plan, which can be executed with other moves, for example 66...♔g7 67.♔h4 ♔f7 68.g5 ♗e2 69.g6+ ♔f6! 70.♗c5 ♗f3 71.♗d4+ ♔f5! and White cannot play h5-h6.

Eric Iborra Polo 1423
Pablo Fuertes Cirauqui 1792
Salobreña ch-ESP jr 2019 (5)



Black to move

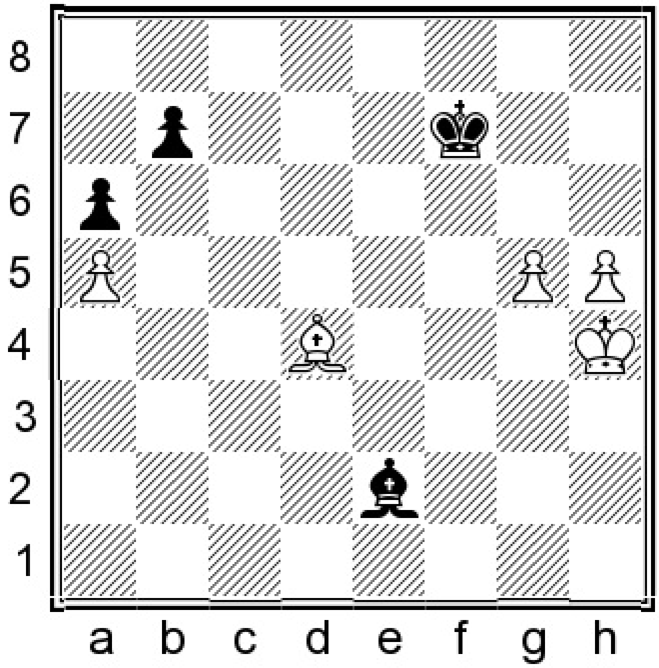
And we end with a game between young players who are unfamiliar with the theme and who make several mistakes.

Do you think that Black can make a draw here? Because if it were White to move, Black should lose.

44...♔g7?

Yes, Black can draw, but not with this move, which seems so natural. The pair of white pawns (although very close to the edge) are very well positioned and create problems. The black pieces can cope with them by adopting a rather unusual position. For this, the bishop must increase its mobility and the king must stand ready to go to the f5-square.

44...e3!. There are other moves to draw, but giving up this *useless pawn* is the simplest. Now all the black bishop's diagonals are open and it can quickly choose the most appropriate one: 45.♗xe3 ♗d1 46.g5 ♗e2 47.♗d4 and we have reached the critical position.



analysis diagram

The black pieces can control the pawns with a manoeuvre which should come as no surprise to us by now: 47...♔e6! (everything else loses, for example 47...♗d3? 48.g6+ ♗xg6 49.hxg6+ ♔xg6 and in this position White wins, thanks to the presence of the black pawn on b7) 48.g6 ♔f5!=. The pair of white pawns are placed under control.

44...♔g7? 45.g5?!

Offering Black a second opportunity to sacrifice the pawn, although in this case it is certain that it does not save the game against correct play. 45.♗e3! could be considered best from the point of view of technique: 45...♗d1 (45...♔f6 46.♗d4+! ♔e6 47.h6!+–) 46.g5 ♔f7 47.♗d4! e3 48.g6+ ♔g8 49.h6+–.

45...♗e2

Instead, 45...e3!? is a good attempt, but if White declines the pawn offer he can win. 46.♗c3+! prevents Black from bringing his king to f5 in time (46.♗xe3? does not win, because once again it allows Black to set up the defensive mechanism: 46...♔f7 47.♗d4 ♔e6! 48.g6 ♔f5=): 46...♔f7 (46...♔h7 47.♗e5!+–, preparing g5-g6 and ♗f4) 47.g6+ ♔e6 48.h6+–.

46.♗c3+ ♔h7 47.g6+ ♔h6 48.♗d2+ ♔g7 49.♔g5 1-0

Now the pawns cannot be stopped.

Pattern 43 Two distant passed pawns

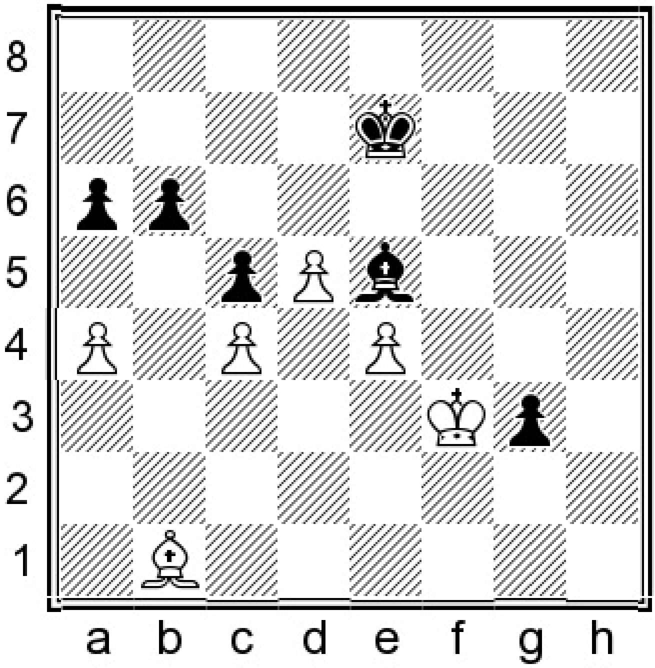
We are going to take a step forward in the logic of endings with opposite-coloured bishops. Now that we have studied the four main defensive methods to steer the game to a draw (blockade, fortress defence, zonal defence and lateral control), we are in a position to understand better the situations where the stronger side can win.

We have just seen that the zonal defence works very well against passed pawns which are separated by only one or two files. The logical conclusion is that to win, two more widely separated passed pawns are needed. This is indeed the case, and it is one of the most important rules in endings with opposite-coloured bishops:

Two distant passed pawns (usually with three or more files between them) almost always win.

To illustrate this principle, there is an almost unsurpassable example, and the fact that it was not played with total precision does not detract from the extraordinary merit of the player in charge of the black pieces, Mikhail Chigorin. This player, often called the father of Russian chess, discovered the essence of this position without anyone having taught him the principles. For the record, I wish to express my complete admiration.

Polner
Mikhail Chigorin
Russia 1881



Black to move

We see that there is material equality, and White has two connected passed pawns. However, Black wins because White’s two pawns suffer from the familiar *blockade* and Black can create *two distant passed pawns*.

1...b5!!

It is essential to create a passed pawn on the queenside.

On the other hand, White's three passed pawns will not be dangerous, because the black bishop will be able to stop them all, using the same diagonal, along which it also defends the black passed pawn on g3.

2.axb5

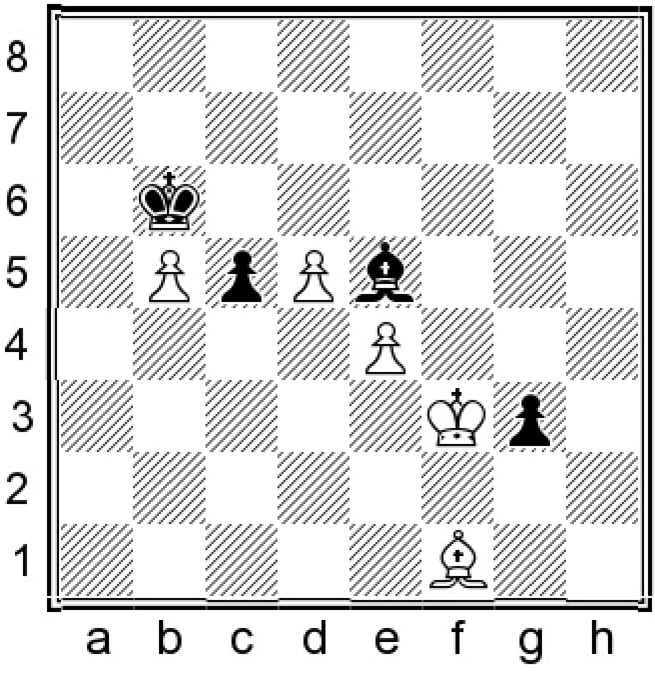
2.cxb5 axb5 3.a5 makes it easier for Black to win: after 3...♔d6, the black king captures White's a-pawn and then supports his own pawns.

2...axb5 3.cxb5

White can try to create a fortress with 3.♗d3 b4 4.♗c2, because the black king cannot invade the queenside, but here too the distant passed pawns show their effectiveness as White's bishop is condemned to play a passive role and the black king will be able to penetrate: 4...♔f6 5.♗b3 ♔g5 (5...♗f4! followed by ...♔e5 is even simpler) 6.♗d1 ♔h4 7.♔g2 ♗d6! (zugzwang. The white bishop controls the important points b3 and g4 and these are on different diagonals) 8.♗b3 (8.♔g1 ♔h3! followed by ...g3-g2) 8...♔g4 9.♗d1+ ♔f4 10.♗c2 ♔e3 and the black king heads unstoppably for the queenside.

3...c4!

From now on we shall analyse the correct continuation. The game continuation was 3...♔d7?, which against correct defence leads to a draw: 4.♗d3 ♔c7 5.♗f1 ♔b6.



analysis diagram

The critical position. White is in time to swap the defensive roles of his king and bishop (*division of labour*). The objective is for the white king not only to stop the passed pawn but also to capture it. This can only be done with the c-pawn, because by sacrificing his passed pawns White will be able to divert the black bishop from its defence. He is unable to do this with the g-pawn as the black bishop defends it and can stop all three white pawns using the same diagonal.

A) 6.♔g2? ♔a5 7.♔f3 ♔b4 8.b6 c4 9.b7 c3 10.♗d3 ♔b3 0-1;

B) 6.♔e3! executes the plan of 6...♔a5 7.♔d2 c4 8.♔c2 ♔xb5 9.♗g2 ♔c5 10.♗f3 (White waits until the black king moves away in support of the g-pawn) 10...♔d4 11.♗h1 ♔e3 as explained above. The king gives up control of the c3-square and with 12.d6! White immediately diverts the bishop from the defence of the c-pawn: 12...♗xd6 13.♔c3=.

4.♗a2

After 4.b6 ♔d6 5.b7 ♔c5 Black will win the bishop for the c-pawn and White is unable to divert the black bishop.

4...c3 5.♗b1 ♔d6!

Now the king moves to support the pawn which is stopped by the bishop. This remains the correct procedure in such positions.

6.♗d3 ♔c5 7.♗c2

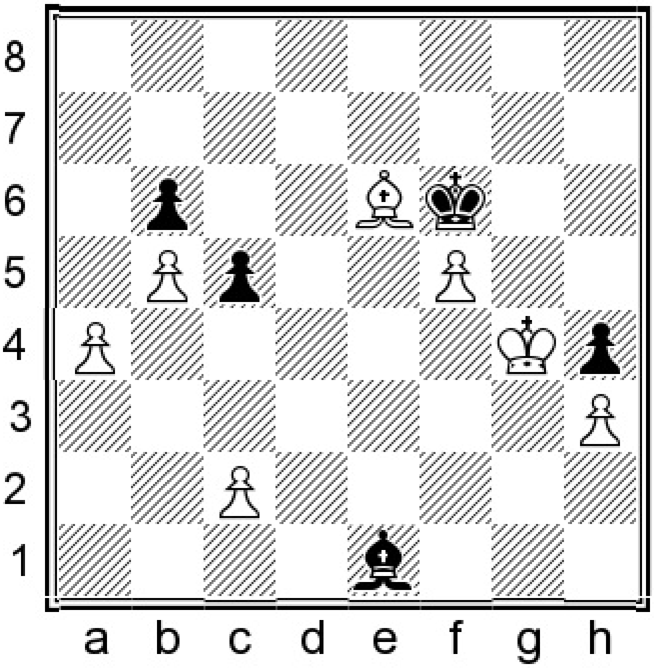
Here there is no time for White’s king and bishop to exchange roles. If 7.♔e3 ♔b4 8.♗f1 c2–+.

7...♔b4 8.♔g2 ♔a3 9.♔f3 ♔b2–+

I think the progress of this ending remains impressive even today and it is one of the examples that my pupils remember best, therefore one of those that best etches itself in the memory. It presents us with one of the paradoxes so frequent in endings with opposite-coloured bishops: although several pawns up, we can find it impossible to win, but it also turns out that we can win even if we are pawns down.

Now for a more modern example, more intricate, but with the same underlying idea: creating two distant passed pawns.

Marc Narciso Dublan 2450
Fernando Miguel 2250
Torrevieja 1997

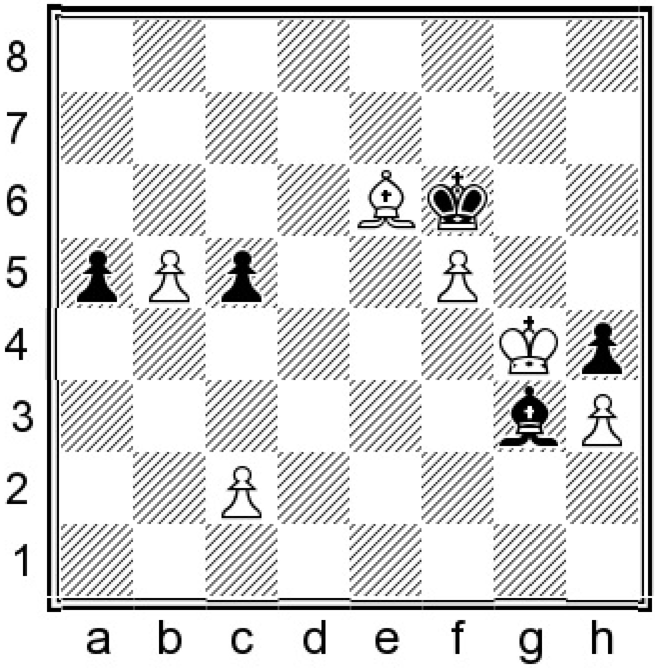


White to move

We are in the final phase of a game which could well have been placed in other sections of the book. White has one passed pawn already (f5) and a queenside majority which might well produce another one. The win seems to be very near, but patience is still required.

56.a5?

Too hasty. White needs to create two widely separated passed pawns but with this move he ends up with two that are close together. The first requirement for White is to give his opponent the move: 56.♗c8! ♗g3 (or 56...♔f7 57.♔g5! (zugzwang) 57...♔f8 58.♔g6 ♗c3 59.f6 ♗e1 60.f7 ♗c3 61.♗e6 ♗d2 62.♗c4 ♗c3 63.♔g5 ♗e1 64.a5 (the plan with c2-c3 also wins) 64...♗xa5 65.♔xh4 ♔g7 66.♔g5 ♗d2+ 67.♔f5 and the king heads off to capture the b6-pawn, after which White will finally acquire the two long-awaited widely separated passed pawns) 57.♗d7 (57.a5?! bxa5 is less clear) 57...♗e1 58.♗e6 (zugzwang; the bishop has returned to its ideal diagonal to control Black's future passed a-pawn) 58...♗g3 59.a5! bxa5



analysis diagram

60.♗b3. Finally the two widely separated passed pawns have been created. Now the white bishop will position itself on c2, defending the f5-pawn and controlling the black passed pawn: 60...♗c7 61.c4 ♗g3 (61...♗b6 62.♔f4! and the white king moves to the queenside to support the b-pawn; 61...♗d6 62.b6 ♗b8 63.♗c2 ♗d6 64.♔xh4+–) 62.b6 ♗e5 63.♗c2 ♗g3 64.♔f3! (the king has to pass through this square, allowing the black pawn to advance two steps) 64...a4!? 65.♔e4! a3 66.♗b1 and finally the white king will move to support the passed pawn on the b-file, in much the same way as happens in the game.

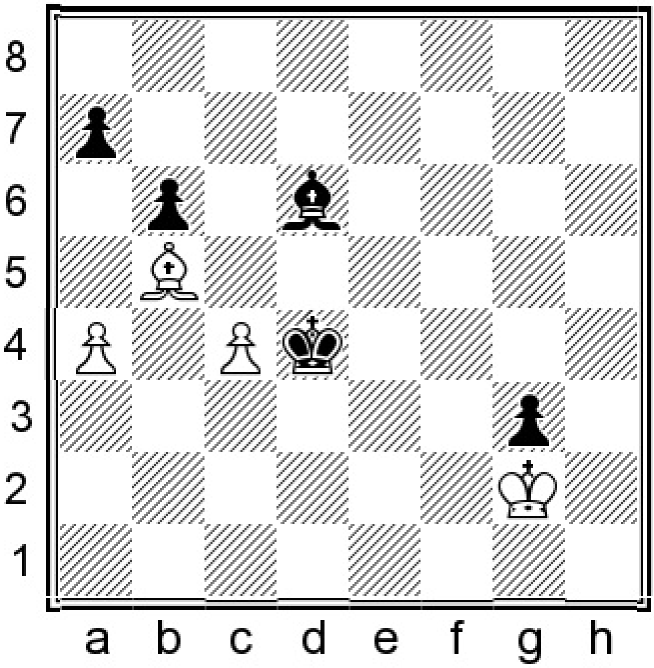
56.a5? bxa5?

Allowing the creation of two widely separated passed pawns. Instead, 56...♗xa5! draws: 57.♔xh4 ♗d2 (initiating the zonal defence) 58.♔g4 ♗c1 59.♔f3 ♔e5! (59...♗h6? is much worse in view of 60.♔e4! and the zonal defence is breached) 60.h4 ♗h6 61.♔g4 ♗c1 62.♔h5 ♔f6!=.

57.♔f4 a4 58.b6 a3 59.♔e4 ♗a5 60.b7 ♗c7 61.♗b3 ♗b8 62.♗a2 ♗a7 63.c4 ♗b8 64.♗b1 ♗a7 65.♔d5 a2 66.♗xa2 ♔xf5 67.♔c6 1-0

If we are aware of the winning mechanism (creating two widely separated passed pawns) we shall sometimes be able to prevent it:

Ibragim Khamrakulov
José Carlos Ibarra
Villarobledo rapid 2008 (analysis)



White to move

This position arose during the analysis of a game from a rapid tournament. From the previous position, we already know that if we have a passed pawn on one side of the board, the best way to win is to create another on the opposite wing. Here Black has one such pawn and the position on the other wing is not a secure fortress by any means, so we should investigate and search for the ideal pawn break:

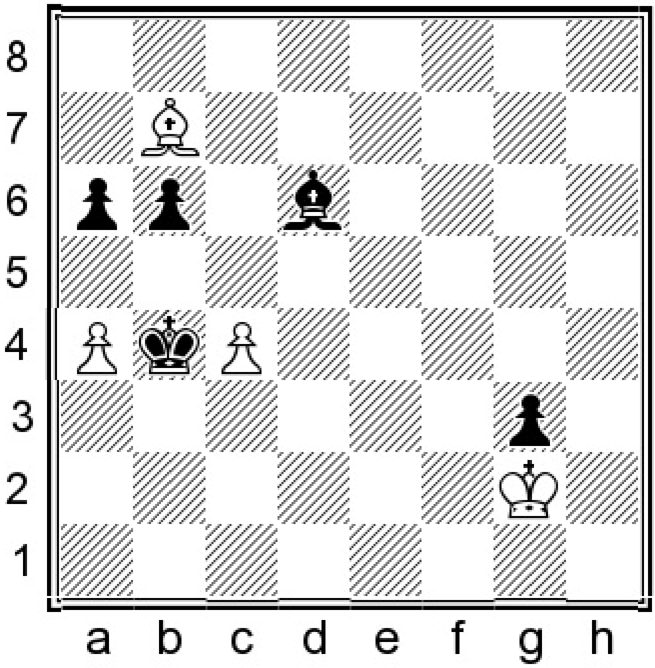
1.♔f3 ♔c5 2.♗a6 ♔b4 3.♗b5 ♔a5

The black king has occupied the ideal position. But one might easily think that any pawn breaks are impossible.

4.♔g2?

This move, which ignores the opponent's intentions, allows the creation of a second passed pawn and loses. Instead, 4.♗c6! a6 5.♗b7 is the typical defensive procedure: attack the pawn which is on the same colour as the bishop and thus restrict the opponent's options and in this case prevent the creation of a passed pawn: 5...♔xa4 6.♗xa6 and now the position is definitely a fortress and very simple.

4...a6 5.♗c6 ♔b4 6.♗b7



The scenario is ready for the pawn break which will create the second passed pawn:

6...b5! 7.cxb5

7.axb5 a5! 8.♗e4 a4 9.b6 a3 10.♗b1 ♔xc4+–; or 7.♗xa6 bxa4–+.

7...a5!

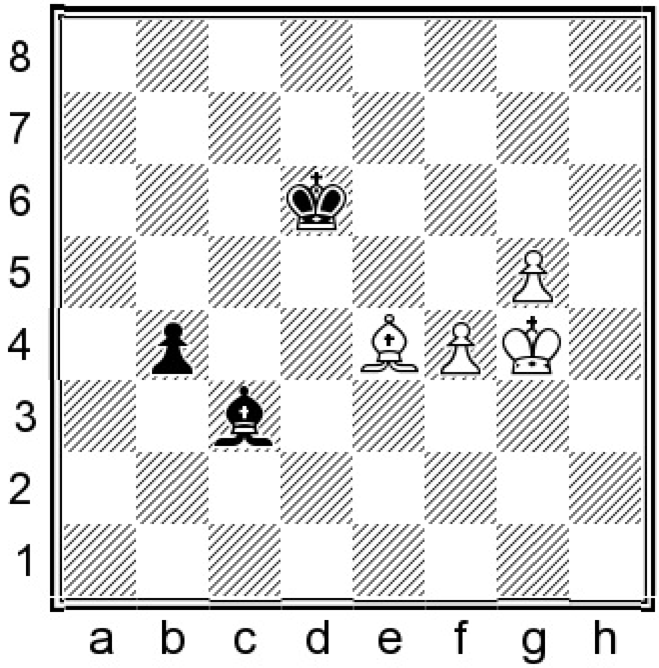
There is no way to defend the a4-pawn, therefore the Black’s a-pawn will become the second passed pawn.

8.b6 ♔xa4 9.♗e4 ♔b4–+

Pattern 44 Two connected passed pawns

This is a very simple theme, but I believe it is important to devote a section to it because the theoretical positions with opposite-coloured bishops, where a bishop successfully stops two connected passed pawns, often lead to mistakes. Usually two connected pawns, when not blockaded, can only be stopped by means of sacrificing the bishop, so that if there is another pawn (provided it is not the ‘wrong rook’s pawn’), the position is almost always a win. Even when the stronger side does not have another pawn, the position is a win if the defender is unable to set up the correct defensive position.

Veselin Topalov 2788
Peter Leko 2763
Dortmund 2005 (9)



White to move

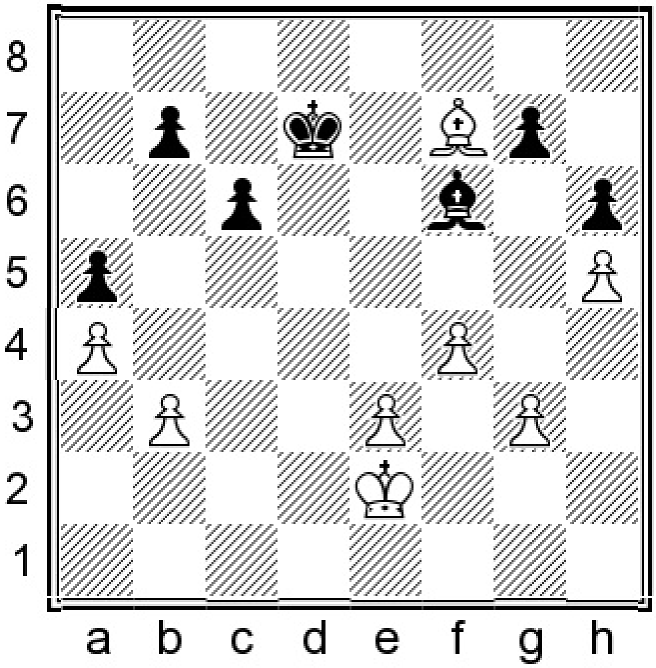
Black has no time to reach the correct defensive position against the f- and g-pawns, and in these circumstances the pawn on b4 is completely useless.

96.♗c2 ♔e7 97.♔h5 ♔f7

Black is just one tempo short. If the king reaches g7, the defensive position is achieved and the position is a draw. White prevents this and the rest of the winning plan is trivial:

98.♔h6! ♔g8 99.f5 ♔h8 100.♔g6 ♗d4 101.f6 ♗e3 102.♔f5 ♔g8 103.♗b3+ ♔h8 104.g6 ♗h6 105.♔e6 ♗g7 106.fxg7+ 1-0

Kiril Georgiev 2655
Anatoly Karpov 2693
Dubai 2002 (3)



Black to move

This position with many more pawns will reduce to one similar to the last one. Black's 3-2 majority is harmless, but White's 4-2 will result in the creation of two connected pawns. White only needs to take care in advancing them.

43...b5 44.♔d3

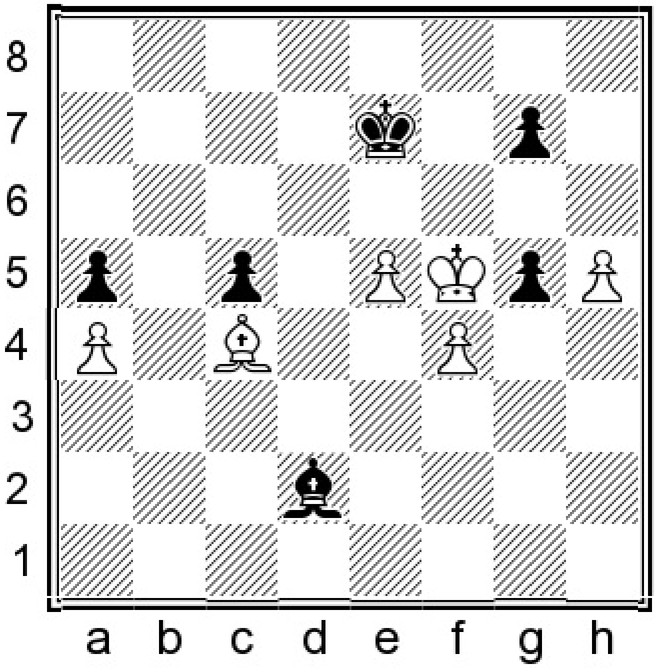
44.axb5?! would have allowed unnecessary counterplay.

44.e4!, on the other hand, seems to be a more logical move order and stronger. It is curious that in the previous game Topalov was also in no great hurry to advance the pawn.

44...♗b2 45.e4 ♔e7 46.♗g8 ♔f8 47.♗h7 ♗a3 48.e5 ♗b4 49.♗e4 ♗e1 50.g4 bxa4 51.bxa4 c5

Also, 51...♗g3 52.♔e3 c5 53.♗d5+– leads to essentially the same position.

52.♗d5 ♔e7 53.♗c4 ♗g3 54.♔e4 ♗e1 55.♔f5 ♗d2 56.g5 hxg5



This is one of the few key moments of this ending.

57.♔xg5!

Ensuring the creation of the two connected passed pawns.

57.fxg5? would have enabled a zonal defence on Black's part, with a probable draw.

57...♗c1 58.♔g4 ♗b2 59.♔f3 ♗c1 60.♔e4 ♗d2 61.h6

It is essential to sacrifice this pawn to create the two connected passed pawns, which in this case will prove stronger than the two separated passed pawns.

61.f5? would have been one of those careless errors of serious proportions and would have made a white victory almost impossible.

61...gxh6 62.f5

Black resigned.

After f5-f6 and the necessary sacrifice of the black bishop, White has the 'right rook's pawn' to queen.

Having studied the defensive methods and the positions with two passed pawns in very different circumstances, we can establish the following **Conclusions:**

1) Two connected passed pawns win when they are not blockaded, when the sacrifice of the defending bishop for both pawns is not possible, or is insufficient, and when lateral control cannot be established.

2) Two separated passed pawns which are very close together (only one or two files apart) almost

never win. Normally they can be restrained by means of the zonal defence.

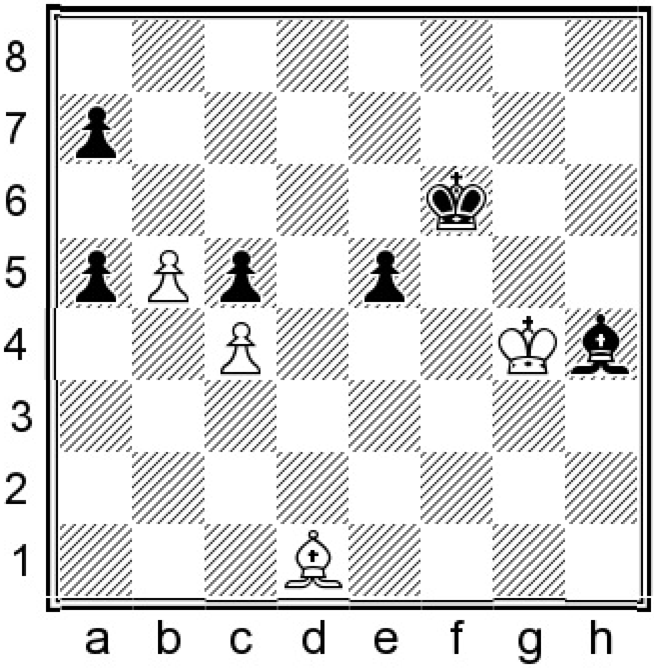
3) Two widely separated passed pawns (normally three or more files apart) win, if there is no other factor which creates counterplay.

Pattern 45 The great detour

There are two typical procedures which allow certain positions to be unbalanced and specifically which can breach the *zonal defence*: these are *the screen* (**Pattern 46**) and a lengthy outflanking manoeuvre that we shall call *the great detour*. In this section we shall study the second of these. Other methods of breaching the zonal defence, such as deflection by sacrificing a pawn, are also interesting, but we include them in the section on the other pawn sacrifices.

The great detour is a typical resource in opposite-coloured bishops endings, but it can also be seen in others, such as with bishops of the same colour, or bishop against knight: in other words whenever one side has only one bishop. It is a consequence of that piece being unable to defend squares of the opposite colour, which allows the enemy king to outflank. We can already encounter it in some theoretical positions, for example in **Ending 151** in *100 Endgames You Must Know*, but here we are going to see it in positions from practical games with more pawns.

Alexei Shirov 2610
Ulf Andersson 2625
Biel 1991 (5; variation)



White to move

In the game Shirov took the bishop, which we shall study in **Pattern 48**, but White could instead try to set up a zonal defence:

45.♗c2!?

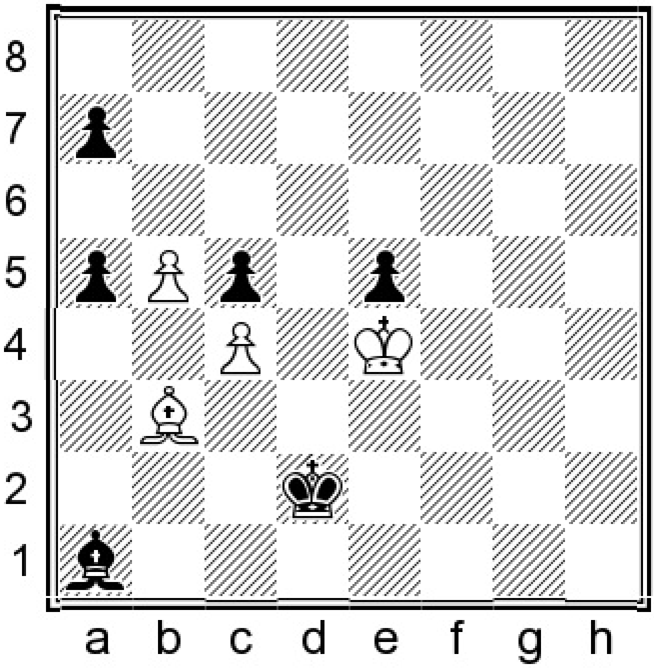
Black’s pawns cannot advance and his king is unable to penetrate. This is a typical zonal defence, which can only be breached by means of *the great detour*:

45...♗e1

The great detour is based on successive unilateral zugzwang positions. Here we have the first of these.

46.♗a4!?

46.♔f3 is the most typical variation: 46...♔g5 (starting the great detour) 47.♔e4 ♗c3 48.♗a4 ♗d4 49.♗c2 ♔g4 50.♗a4 ♔g3 51.♗d1 ♔f2 52.♔d3 ♗a1 (zugzwang) 53.♔e4 ♔e1 54.♗b3 ♔d2–+.



analysis diagram

Black’s king has completely outflanked its white counterpart and now prepares to support the advance of his a-pawn.

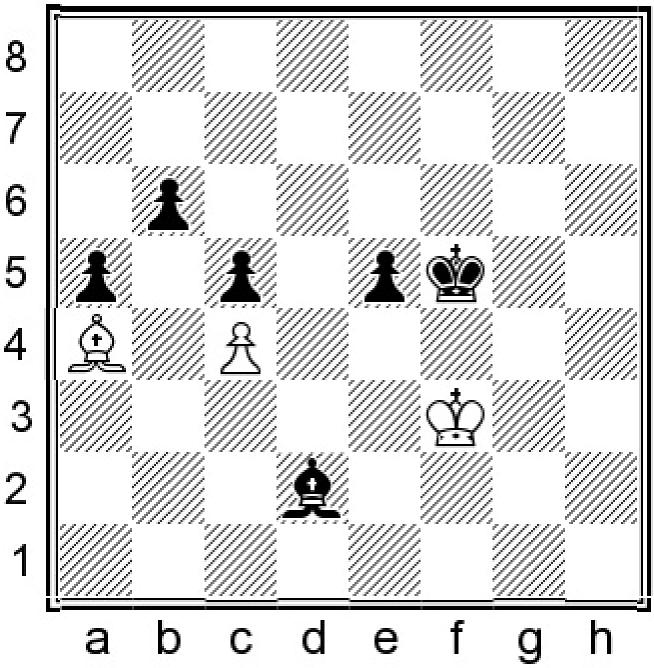
46...♗d2

Threatening 47...e4.

47.b6!?

Sacrificing a third pawn but setting up a fortress which seems impregnable. 47.♔f3!? would be the normal continuation: 47...♔f5 48.♗c2+ (a typical situation) 48...e4+! (the pawn sacrifice which breaches the zonal defence; the black king will slip in via e5 and d4) 49.♗xe4+ ♔e5 50.♗c6 ♔d4 51.♔e2 ♗g5 52.♔d1 ♔c3–+.

47...axb6 48.♔f3 ♔f5



49.♗d7+

This check is the justification for the sacrifice 47.b6, and this tenacious zonal defence is what forces Black to initiate and then complete the manoeuvre of *the great detour*.

49...♔g5 50.♗b5 ♔h4 51.♗c6

51.♗d7 would have set up the first barrier, which would have been surmounted by the corresponding zugzwang 51...♗c3 52.♔f2 ♗b2 53.♔f3 ♗d4.

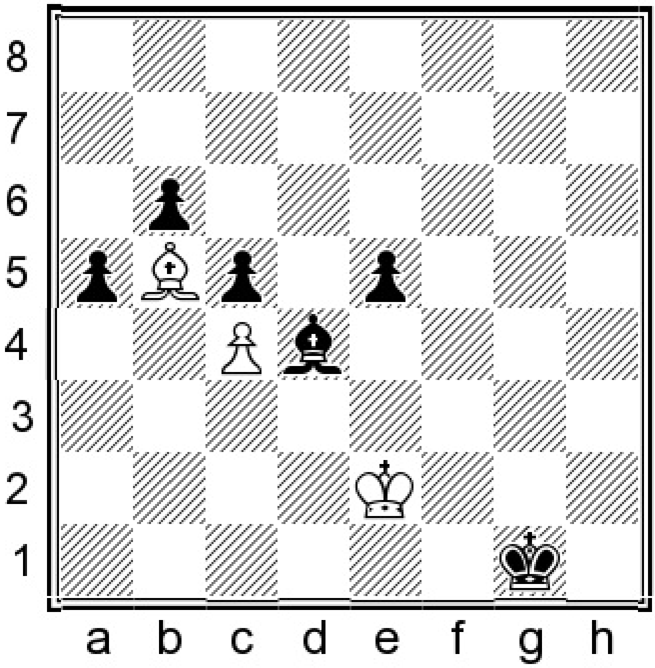
51...♔h3 52.♗e8 ♔h2 53.♗c6 ♗c3 54.♗b5 ♗d4 55.♗c6 ♔g1 56.♔e2!

A new temporary blockade, which will once again be breached by another zugzwang. The great detour is more visually striking in this other variation: 56.♗b5 ♔f1 57.♗a4 ♔e1 58.♗b5 ♔d2–+.

56...♗b2 57.♗d7 ♗a1 58.♗c6 ♗d4

Zugzwang. Black must allow the moves ♔g2 or ♔f1.

59.♗b5



Another crucial moment which is worth observing.

59...♔g2!

The hasty advance of the pawn with 59...e4?! closes off certain of the black king’s entry routes. In this case the zonal defence can still be breached by means of the sacrifice of the central pawn, but that is not always the case: 60.♗a4 e3 61.♗c6 ♔h2 62.♗a4 ♔g3 63.♗b5 ♔f4 64.♗c6 ♗g7 65.♔d3 ♗h6 66.♔e2 ♔e5 67.♔d3 e2! (the sacrifice of the pawn) 68.♔xe2 ♔d4–+.

60.♗d7 ♔g3 61.♗c6 ♔f4 62.♔d3 e4+!

Black takes advantage of some tactical details, although preparing a new zugzwang was also possible:

62...♗a1 63.♗b5 ♔f3 64.♗c6+ ♔f2 65.♗b5 ♔e1 66.♗a4 ♗d4 67.♗b3 e4+ 68.♔xe4 ♔d2, completing the outflanking.

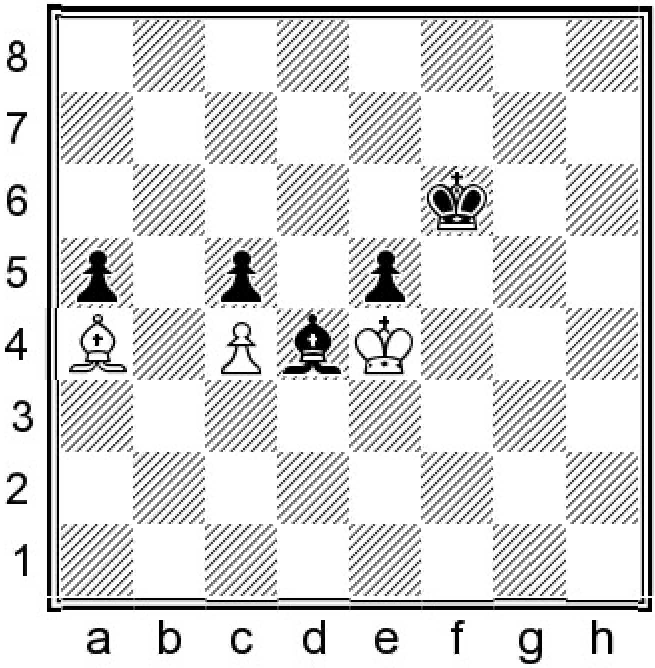
63.♔e2

But not 63.♗xe4? a4–+.

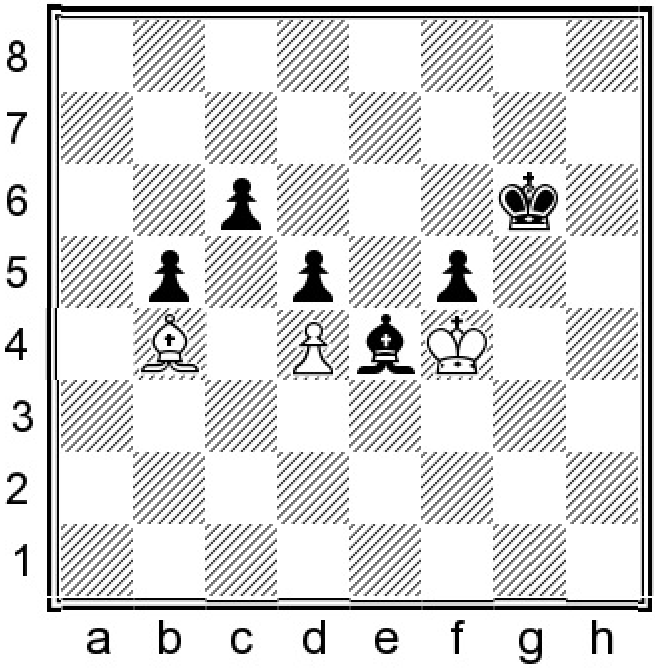
63...♗g7 64.♗b5 ♗h6 65.♗c6 ♔e5 66.♗b5 ♔d4–+ and the king has penetrated, although in this variation it was through the centre.

We shall now consider two diagrams, based on the same game, to complete our understanding of this pattern.

Series: The great detour



Positive example



Negative example

In the first position, Black implements *the great detour* and wins. No detailed explanations are needed, because that would merely repeat what we have just seen in the game:

1...♔g5 2.♗d1 ♔h4 3.♔f3 ♔h3 4.♗c2 ♔h2 5.♗d1 ♔g1 6.♗a4

Instead, 6.♔e2 would perhaps offer greater resistance to the invasion by the black king, but it is also inadequate: 6...♔g2 7.♗c2 ♔g3 8.♗a4 ♔f4 9.♗c6 e4 10.♗a4 e3 11.♗d7 ♗g7 12.♗c6 ♗f6 13.♔d3 ♗g5 14.♔e2 ♔e5 15.♔d3 ♗h6 16.♗a4 ♔f4 17.♔e2 ♔e4 18.♗b5 ♔d4–+.

6...♔f1 7.♗b3 ♔e1 8.♗a4 ♔d2 9.♔e4 ♔c3 10.♗b5 ♔b3 The whole variation is obvious. It is curious to map out the trajectory of the black king, executed in ten consecutive moves.

In contrast, in the second position, where we have added a pawn for the stronger side, who therefore has 4 vs 1, in other words three extra pawns, we see that *the great detour* is not possible against the bishop's pawn, because the defender's king is able to maintain the zonal defence, with only minimal help from the bishop.

1.♔g3 ♔g5 2.♗e7+

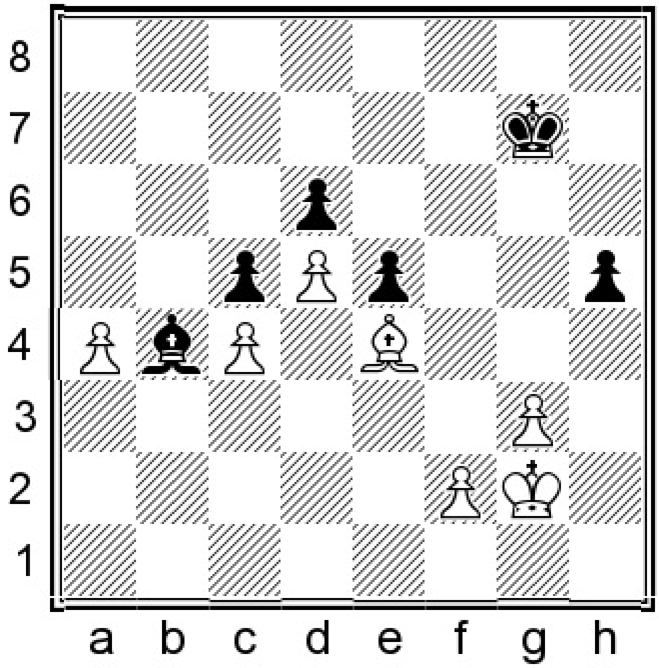
This check is the key and the only element worth commenting on.

2...♔g6 3.♗b4 ♔f6

3...♔h5 4.♗c5=.

4.♔f4 ♔e6 5.♔e3 ♔d7 6.♔f4 ♔c7 7.♔e3 ♔b6 8.♔f4 c5 9.dxc5+ ♔c6 10.♔e5=

Daniel Fridman 2653
Gadir Guseinov 2613
Istanbul ol 2012 (4)



White to move

In this sensational game, White exploits all the details of the position to execute *the great detour*.

49.♔f3 ♔f6 50.♗d3 ♗e1 51.♗e2 ♔g5

51...♔e7 52.♔e3+–.

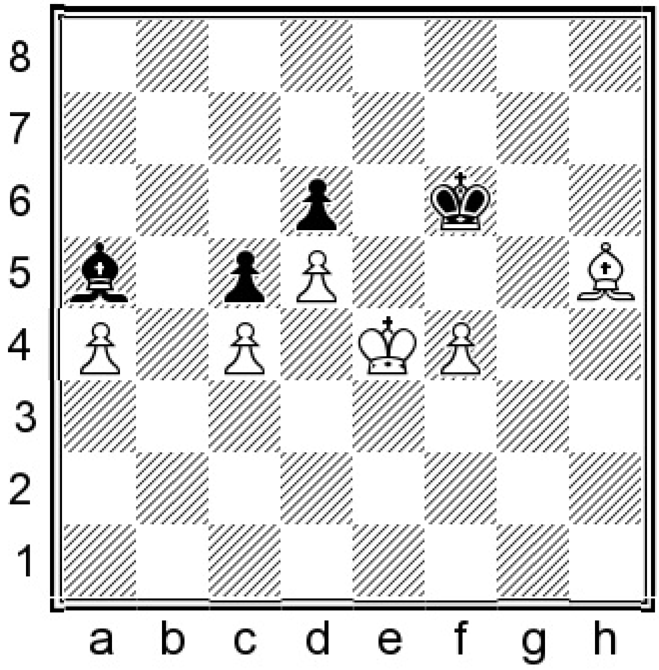
52.♔e4 ♗a5

52...♗d2 53.f4+! exf4 54.gxf4+ ♔g6 55.♗xh5+! (once again the sacrifice of the bishop) 55...♔xh5 (55...♔f6 transposes to the game) 56.♔f5 ♔h6 57.♔e6 ♗xf4 58.a5 and it is not possible stop the pawn.

53.f4+ exf4 54.gxf4+ ♔f6

54...♔g6 simply loses a tempo, because the h5-pawn can still be captured: 55.♗xh5+! ♔xh5 56.♔f5+–.

55.♗xh5



White wins, because his king can outflank, thanks to the position of his pawn on f4. Black is unable to apply the principle of attacking this pawn, because his bishop cannot abandon control of the a5-square.

55...♗b4 56.♗e2 ♗a5 57.♗d3 ♗b4 58.♔f3 ♗c3 59.♔g4 ♗a5

Or 59...♗d2 60.♔h5! ♗xf4?? 61.a5 and the pawn cannot be stopped.

60.♔h5 ♗b4

60...♗d2 61.♗c2 ♗a5 62.♔h6+–.

61.♔h6 ♗c3 62.♔h7 ♗d2 63.♔g8 ♔e7

63...♗c3 64.♔f8 ♗a5 65.♔e8+– ♗b4 66.♔d7 would be the variation which would complete the white king’s outflanking manoeuvre.

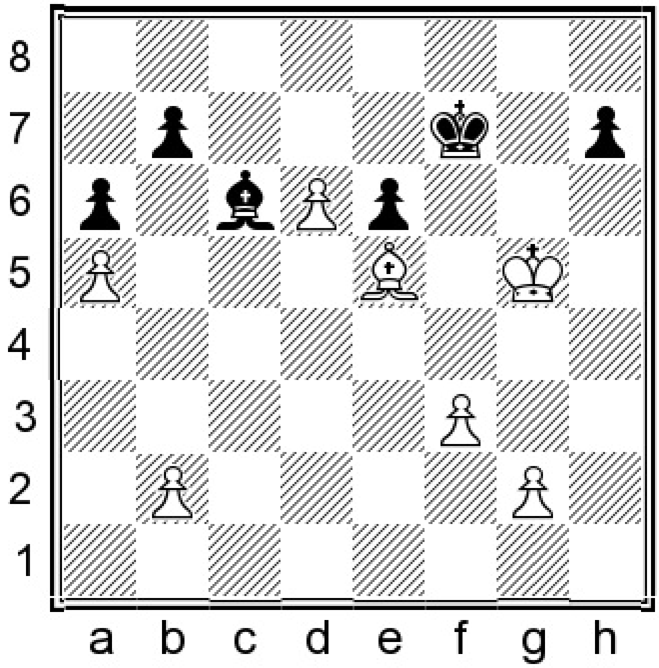
64.f5 ♗c3 65.♗c2 ♗d2 66.♔g7 ♗c3+ 67.♔g6

Black resigned.

Pattern 46 The screen

Sometimes a high-level game brings to the table a resource that is not too well known, and from then on it becomes a subject of discussion and enters the public domain. This happened in the Anand-Topalov match with the mechanism which we are going to call *the screen*. But even before that, many examples had been seen and it was studied in endgame books.

Veselin Topalov 2805
Viswanathan Anand 2787
Sofia 2010 (8)



White to move

A few moves ago the position was a draw. Now Black still seems to be defending comfortably by using zonal defence. But the fact is that he is completely lost:

55.♔h6! ♔g8 56.g4

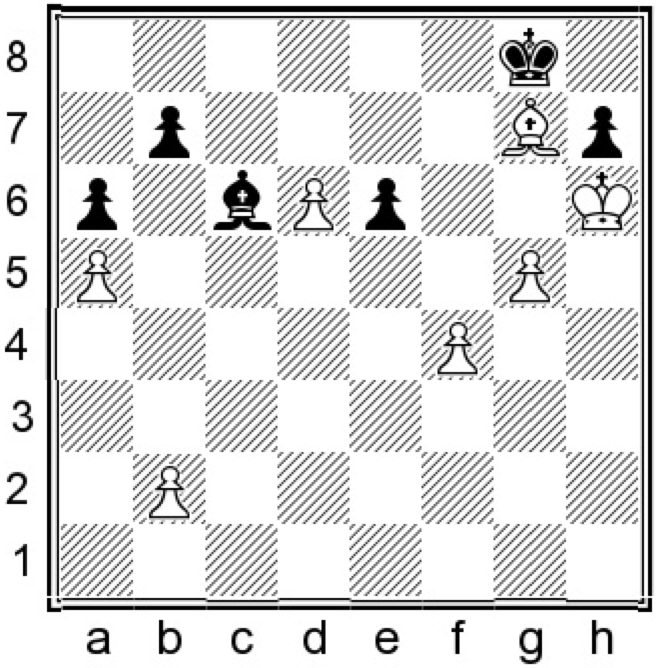
The white pawns can advance at will, given that the black bishop is tied down to the control of the d6-pawn. Furthermore White has several reserve tempi.

56...♗e8 57.g5 ♗c6 58.♗g7!

Here I want to illustrate a few details of White’s manoeuvre with a variation which would be absurd in practice: 58.f4?! ♗d7 59.b4?. This would be a serious mistake, because White loses all his reserve tempi and all Black needs to do is move the bishop to e8 when White puts his own bishop on g7: 59...♗c6 60.♗g7 ♗e8! and we reach a reciprocal zugzwang. White is unable to win.

58...♗e8 Preventing 59.g6 for the moment, but with **59.f4** White employs one of his reserve tempi.

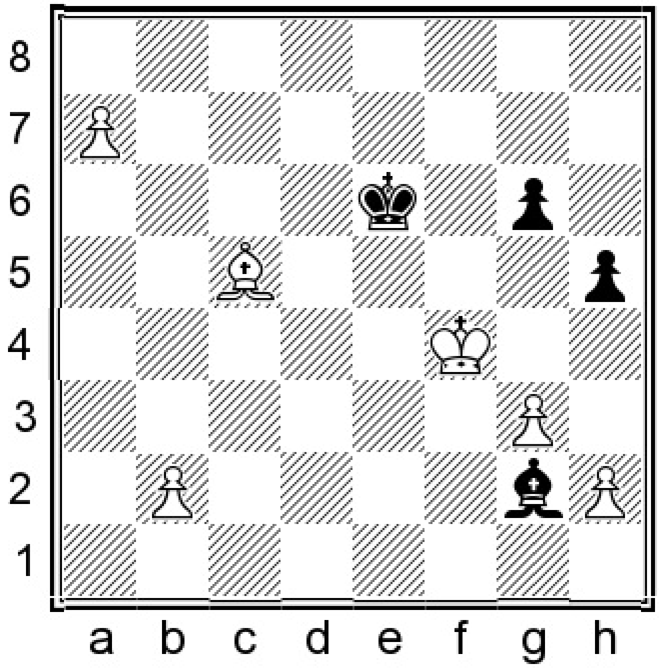
59...♗c6



60.g6!

With this move, White executes one of the most typical ways to breach the zonal defence: *the screen*. The bishop covers the escape square of the defender’s king, while a pawn exchange opens the way for the attacker’s king which overcomes its black counterpart with the help of his bishop. Anand resigned. A natural continuation would be 60...hxg6 61.♔xg6 ♗b5 62.♔f6 ♗d7 63.♔e7+–.

Max Euwe
Daniel Yanofsky
Groningen 1946 (1)



White to move

As has happened in many games, even among the world elite, mistakes in endings with bishops of opposite colour are common. This had already happened in the previous moves of this game. Right now Black seems to be applying a calm zonal defence. Is that not the case?

37.g4!

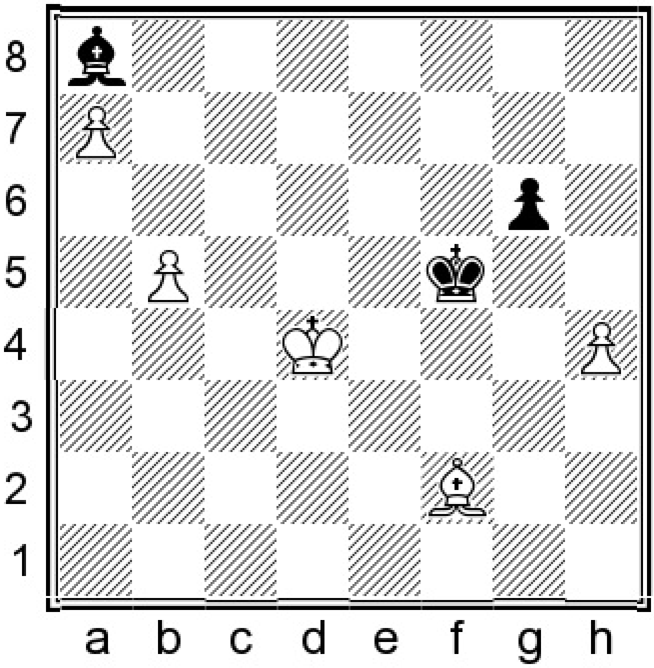
This change in the pawn structure, now or later, allows White to set up a *screen* and overcome the zonal defence. Let us analyse an attempt that does not work: 37.♔g5 ♔f7 38.♔f4 ♗h1 39.♔e5 ♔e8 40.♔d6?! ♔d8 41.♗e3?! ♔c8 and Black has even converted his former zonal defence into a fortress.

37.g4! hxg4 38.♔xg4 ♗h1 39.♔g5 ♔f7 40.♗d4 ♗g2 41.h4 ♗h1 42.b4 ♗g2 43.b5 ♗h1

The black king is tied to the defence of the g-pawn, but as soon as the pawn is exchanged it will be free to head for the queenside, and if the white king wants to move to the queenside, the black king can always interpose. But there is a solution to this problem:

44.♗f6!

White's bishop creates a *screen*, so that his king can get ahead of its opponent in the race to the queenside. 44.♔f4 is not a very logical move, but it illustrates some very interesting variations: 44...♔e6 45.♗f2 ♗a8 46.♔e3? (trying to pass through d4-c5 etc, but this allows Black to set up a zonal defence further forward, which cannot be reduced to the previous one) 46...♔f5! 47.♔d4



analysis diagram

47...♔e6 (with the bishop on a8, this move could be delayed until the white king reaches c5, but moving the bishop would be a decisive mistake, which we should analyse: 47...♗h1? 48.♔c5 ♔e6 49.♔b6 ♔d7 50.a8=♕! ♗xa8 51.♔a7, gaining a crucial tempo: 51...♗f3 52.♔b8! and finally the b-pawn will cost Black his bishop) 48.♔c5 ♔d7 49.♔b6 ♔c8=.

44...♗g2

44...♗e4 fails to 45.♔f4!+–, followed by ♔e5.

45.h5!+– gxh5 46.♔f5!

Just like Anand, years afterwards, Yanofsky resigned. The natural continuation could be 46...♗h1 47.♗h4 ♗g2 48.♔e5 ♗h1 49.♔d6 ♔e8 50.♔c7+–.

Pattern 47 The useless pawn

We now turn our attention to three patterns in which the value of certain pieces or pawns is very different from usual.

It is logical to think that if a player's sole objective is to stop the enemy pawns, then sometimes having a solitary passed pawn, which is easily controlled, will be of no use to him.

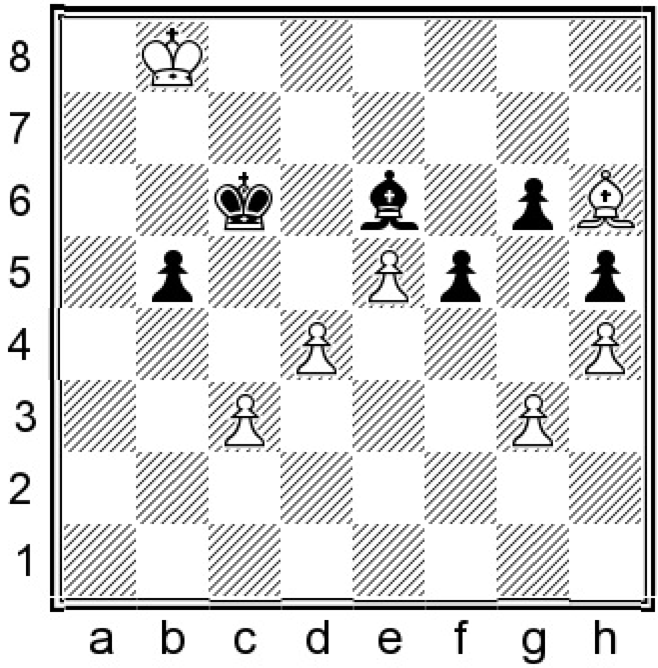
On the other hand, a bishop which is unable to support the advance of its pawns is a piece of little value, and perhaps it can be exchanged for something of greater value, for example one or two pawns, or even a tempo.

Finally, in the following pattern, we shall see that a group of pawns situated on very vulnerable squares can be destroyed with ease and therefore has little or no value.

We'll give our attention now to the first case, the one we have named *the useless pawn*. A badly placed pawn can harm its own side relatively frequently, but it is almost always for accidental tactical reasons. Only in endings of opposite-coloured bishops is it very common for a pawn to harm its own side and not offer any benefit whatsoever, either immediately or in the future. The solution in such cases is to sacrifice it as soon as possible. We have already seen a number of examples in previous patterns, because it is such a common theme that we cannot avoid it. Now we are going to study it as the central theme.

We begin with a crucial game from the 2015 World Cup.

Sergey Karjakin 2762
Peter Svidler 2727
Baku 2015 (7)



Black to move

This game featured several interesting moments with regard to the concepts of play with bishops of opposite colour. But this was perhaps the last opportunity for Black to save the game:

78...♝d7?

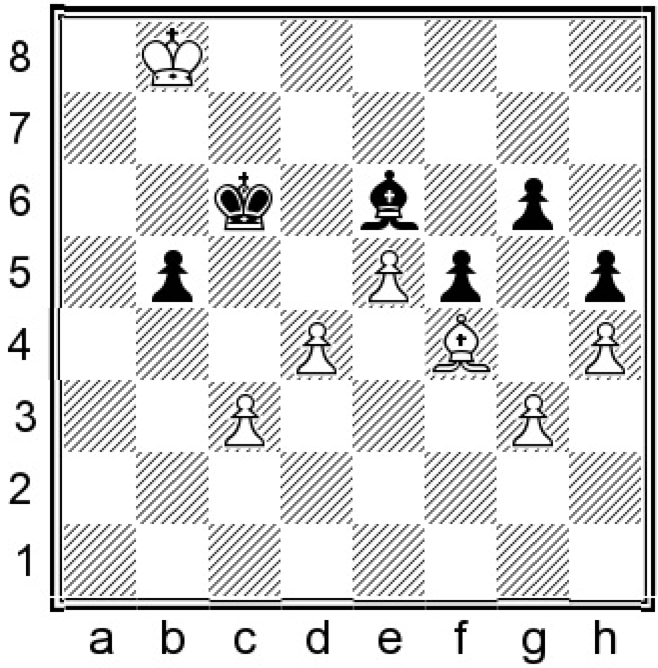
Black is already a pawn down and that makes it much harder to sacrifice another one. But White's central pawns can be blockaded and the black bishop needs the f5-square to be able to defend the kingside and complete the fortress. The f5-pawn is obstructing its pieces and this is the moment to get rid of it: 78...f4!. White can capture in two different ways:

A) 79.♗xf4 leads to the classic fortress: the king stops the opponent's passed pawns and the bishop defends its own pawns. White's king cannot pass through c8, so the only attempt to make progress without sacrificing a pawn is by bringing the king back into play via a5: 79...♗f5 80.♔a7 (80.d5+ ♔xd5 81.♔c7 ♔e6 82.♔c6 ♗d3 is an elementary fortress) 80...♗e6 81.♔a6 ♗c4 82.♔a5 ♗e6 83.♔b4 ♗c4 84.♔a3 ♗e6 85.♔b2 ♗f5 86.♔c1 ♔d5 87.♔d2 ♗g4 88.♗h6 ♗f5 89.♗f8 ♔e4 90.♗b4 ♔d5 91.♔e3 ♗g4 92.♔f4 ♗f5 93.♔g5 ♔e6! 94.♔h6 ♗d3 95.♔g7 ♗f5 and here too the white king can do nothing except return via a5;

B) After 79.gxf4 the position of the pawns is different but the fortress is the same: 79...♗f5 80.♗g5 ♗g4 81.♗e7 ♗e6 and there is nothing to be done.

78...♗d7? 79.♗f4 ♗e6

Presumably Svidler saw no danger here.



80.d5+!

It is curious that Black refused to give up a second pawn and yet loses after restoring material equality. But this is not a sacrifice of the useless pawn. It is a case of deflection, designed to breach the zonal defence.

80...♗xd5

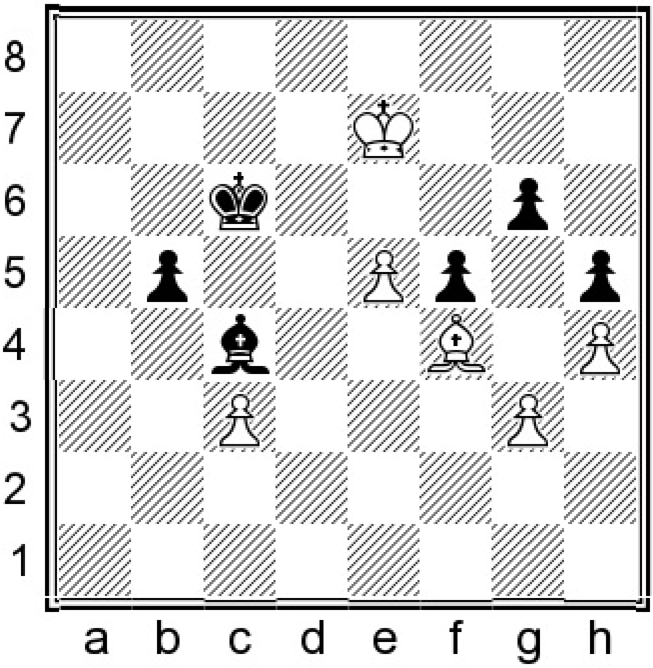
Or 80...♔xd5 81.♔c7 and the white king also reaches the g6-pawn.

81.♔c8!

The zonal defence has been breached. The white king will be able to reach the weakness at g6.

81...♗b3 82.♔d8 ♗c4 83.♔e7

In view of the note to the next move, 83.♔e8! was much more precise, but the reason lies too far beyond our human horizon: 83...♗b3 84.♔e7 ♔c7 85.♔f6 ♔d7 86.♔xg6 ♗d1 87.c4! (closing the a2-g8 diagonal) 87...bxc4 88.♔f7 and the e-pawn advances to the eighth rank, winning the black bishop.



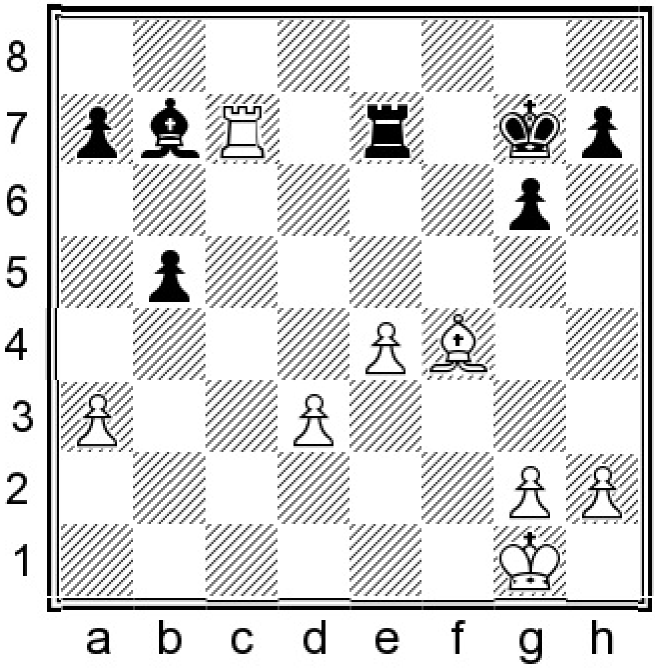
83...♗b3?!

83...♔c7!? offers much more resistance, because it prevents the white king from being able to freely capture the pawns on g6 and h5: 84.e6+ (84.♔f6? ♔d7 85.♔xg6 ♗e2 86.♔xf5 ♗g4+ 87.♔f6 ♗h3 and with the sacrifice of two pawns, Black is able to rebuild an effective fortress) 84...♔c8 85.♔f7 ♔d8 86.♗d6 ♗b3 87.♗e7+ ♔c8 88.♗b4 ♔d8 89.♗a5+ ♔c8 90.♔e7 ♗c4 91.♔d6 ♗a2 92.e7 ♗f7 93.♗b6 ♗e8 94.♔e6 ♔b7 95.♗d4 ♔c7 96.♗c5 ♔c8 97.♔f6 ♔d7 98.♔g7 ♔e6 99.♔f8 ♔d7 100.♗b4+–.

84.e6 ♗c4 85.♔f6 ♗b3 86.♗c1 ♗c4 87.♗a3 ♗b3 88.e7 ♔d7 89.♔xg6 1-0

We continue with a classic position, which we could also have included under the theme of blockade or fortress.

Efim Bogoljubow
Edward Lasker
New York 1924 (14)



Black to move

Here, ‘the other’ Lasker missed a chance to draw the game in brilliant fashion. He decided not to exchange rooks, because he failed to consider the move following, and ended up losing the game:

36...♖xc7

The game continued 36...♔f7? and after exchanging rooks himself and then advancing his king to support his pawns, White won trivially.

36...♖xc7 37.♗xc7 b4!

This is the useless pawn, which was limiting the manoeuvrability of Black’s bishop.

38.axb4

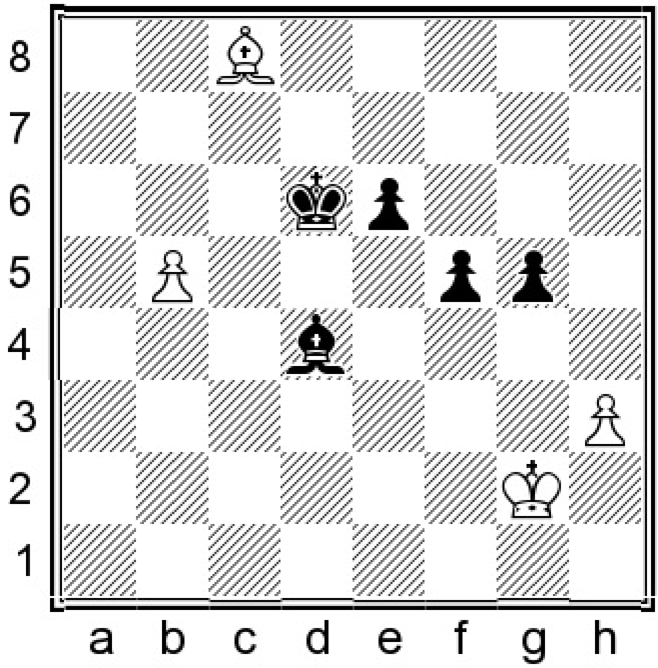
It is curious that the strongest move is not to capture the pawn but rather to sacrifice another one. However, it is not enough to win: 38.♔f2!? bxa3 39.♗e5+ ♔f7 40.♗a1 a2 41.♔e3 ♗a6 42.d4 ♔e7 43.d5 ♗f1 44.g3 a5 45.h4 h5 46.♔d4 a4 47.e5 ♗g2 48.♗b2 ♔d7 49.e6+ ♔d6 50.♗a3+ ♔c7 51.d6+ ♔c6=.

38...♗a6 39.d4 ♗d3 40.e5 ♔f7

The white pawns have moved onto the wrong colour and will be blockaded. From this point onwards, Black’s defence is very easy.

We conclude with a very profound example.

Manfred Schöneberg
Bodo Starck
Weimar ch-GDR 1968 (15)

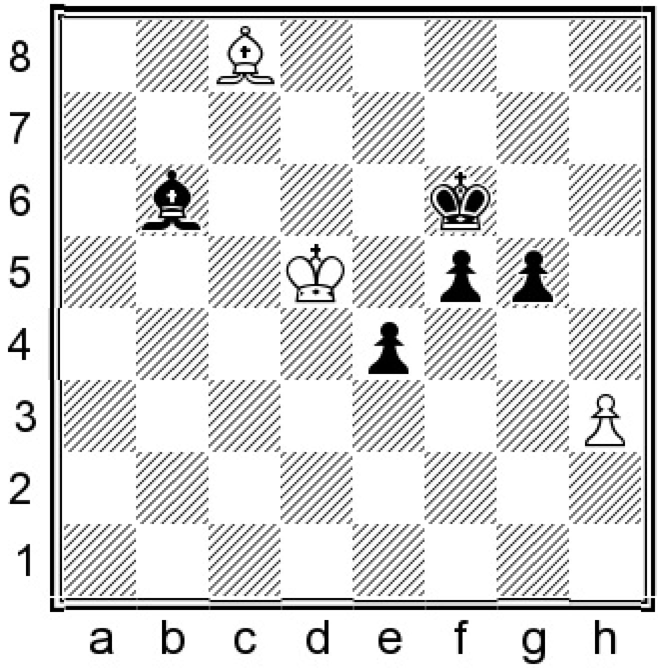


White to move

In the diagram position, the necessity of getting rid of the pawn on b5 is not obvious, although for an expert player its uselessness is clear. We can only arrive at the conclusion that it is necessary to sacrifice it immediately by studying other, more ‘natural’, variations.

58.♔f3?

After this there will be no time to get rid of the b6-pawn and when Black has advanced his pawn to e4 there will be no alternative to giving up the bishop for two pawns. After studying the main line it will become obvious that it was better to play 58.b6! ♗xb6 59.♔f3 ♔e5 60.♔e2!, preparing to exert *lateral control*: 60...♔f6 61.♔d3 e5 62.♔c4 e4 63.♔d5.



analysis diagram

White has completed the transfer of his king to achieve *lateral control* of the pawns (see **Pattern 42**), which is necessary in this case, since the sacrifice of the bishop for two pawns loses. But for the success of this plan it was necessary to have the bishop ready to occupy the a6-f1 diagonal and therefore this diagonal needed to be open, as we can see in the variation 63...e3 64.♗a6=.

58.♔f3? ♔e5?

Black presents White with a second opportunity. Instead, 58...♗b6!, forcing the b6-pawn to stay alive, was the winning move, as the development of the game will make clear.

59.♗d7?

59.b6!=.

59...♗b6 60.♔e2 ♔f6 61.♔f3 e5

Now the only recourse is to give up the bishop for the two passed pawns and this is not sufficient.

62.♗c6 ♔e6 63.♗b7 e4+ 64.♗xe4

64.♔e2 ♔e5.

64...fxe4+ 65.♔xe4

Now White threatens to play 66.h4 with a draw.

65...♗f2! 66.b6 ♔d6 67.♔f5 ♗h4 0-1

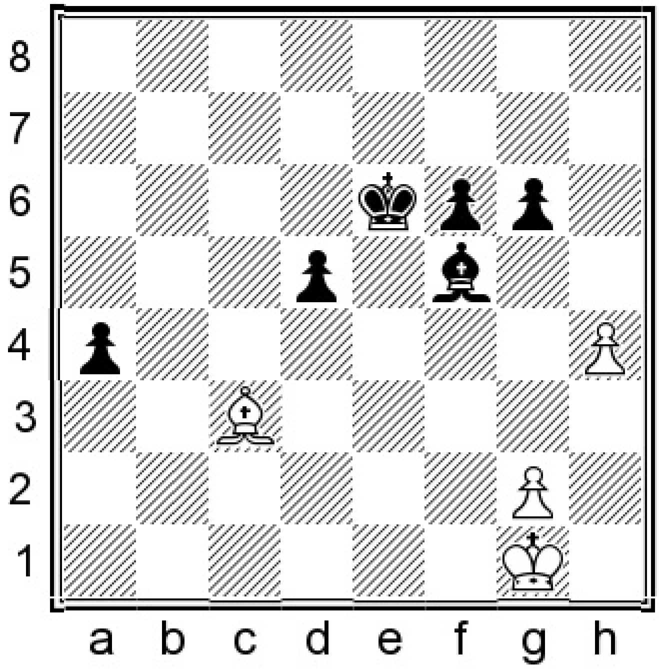
Pattern 48 Sacrificing the bishop

The useless pawn usually belongs to the defending side. On the contrary, sacrificing the bishop is almost always done by the stronger side. Let’s try to understand it philosophically. If a player is a pawn or more up, but they are blocked, and as the bishop is not much use for unblocking them, it may be more useful to exchange it for another pawn, which will make it more difficult for the opponent to control all the passed pawns.

We are going to present a trilogy which is most curious, in that the protagonists in each position had previously been the victims. It seemed to me to be more interesting to present them in reverse chronological order, but maybe some readers will think the opposite.

Let us begin with one of the most famous positions in chess history.

Veselin Topalov 2740
Alexei Shirov 2710
Linares 1998 (10)



Black to move

47...♗h3!!

The impact of this move is due to the unusual nature of the sacrifice: the move appears to be pointless and it is not a capture. But the logic is the same as in the other sacrifices in this chapter: it gains time to penetrate with the king, which will support at least a pair of passed pawns, and in some variations it wins a third pawn by sacrificing itself on g2.

The idea could have arisen as a result of having analysed other variations, among which we shall consider 47...♗e4?! – the same plan, but the bishop gets in the way of the king: 48.♔f2 ♔f5 49.g3=. Doubtless Shirov reached this point and was not sure whether this position was a win or a draw. The two black passed pawns are very close together and the position of the pawn on f6 renders the dream of creating another passed pawn impossible. The most feasible option is to exchange the f-pawn for the g-pawn and the a-pawn for the h-pawn. But that leads to a drawn ending: 49...a3 (49...g5 50.hxg5 fxg5 51.♗b2 ♔g4) 50.♗b4 a2 51.♗c3 ♗b1 52.♔e3 ♔g4 (52...g5 53.hxg5 fxg5 54.♗d4 ♔g4 55.♔f2=) 53.♗xf6 ♔xg3 54.♔e2 ♔f4 55.♔d2 ♔g4 56.♔e3 a1=♕ 57.♗xa1 ♔xh4, with a theoretically drawn position.

To gain some idea of Black’s winning possibilities with this pawn structure, we can say that with White’s ♔ and ♗ on the squares they currently occupy, there are no losing positions.

47...♗h3!! 48.gxh3

48.♔f2 ♔f5 49.♔f3 ♗xg2+!! (this is the hidden key to the move 47...♗h3: the bishop is sacrificed permanently to open the way for the black king) 50.♔xg2 ♔e4 51.♗xf6 d4. Now there are only two passed pawns, but with the *dominant king* (**Pattern 10**) Black wins: 52.♗e7 ♔d3! 53.♔f2 ♔c2! 54.♗b4 d3–+.

48...♔f5! 49.♔f2 ♔e4

The black king is able to cross the defensive line and take up an ideal position in support of its pair of distant passed pawns.

50.♗xf6 d4

With the bishop now cut off from the a-pawn and the white king outside the square, White needs to manoeuvre with the bishop to return to the long diagonal, much further down.

51.♗e7 ♔d3! 52.♗c5

52.♗a3 ♔c2–+.

52...♔c4!

It is essential to gain this tempo; not 52...♔c3? 53.♔e2= d3+? 54.♔d1+–.

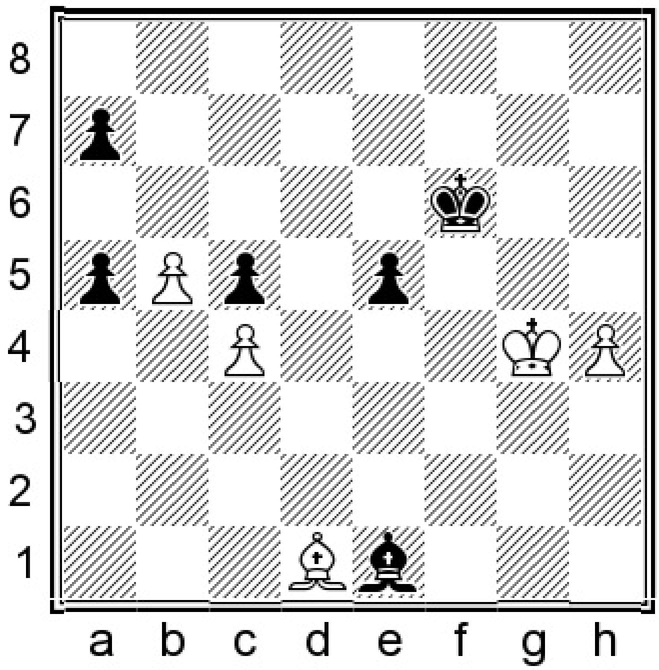
53.♗e7 ♔b3 0-1

54.♗c5 d3 55.♔e3 ♔c2 56.♗b4 a3–+.

But prior to his brilliant sacrifice against Topalov, Shirov had suffered the same treatment.

Alexei Shirov 2610

Ulf Andersson 2625
Biel 1991 (5)



Black to move

44...♗xh4!!

This sacrifice eliminates a pawn which could create counterplay and in particular it opens the way for the black king towards the queenside, by gaining the f5-square.

45.♔xh4?!

45.♗c2 is studied in the theme of *the great detour* (**Pattern 45**).

45...♔f5

The king takes up a dominant position and the bishop cannot cope with Black’s two passed pawns.

46.♔g3

46.♗c2+ ♔f4 47.♔h5 e4 48.♔g6 e3 49.♗d1 a4–+.

46...♔e4 47.♔f2 ♔d3 48.♔e1

Or 48.♗e2+ ♔d2, followed by ...a5-a4-a3-a2-a1.

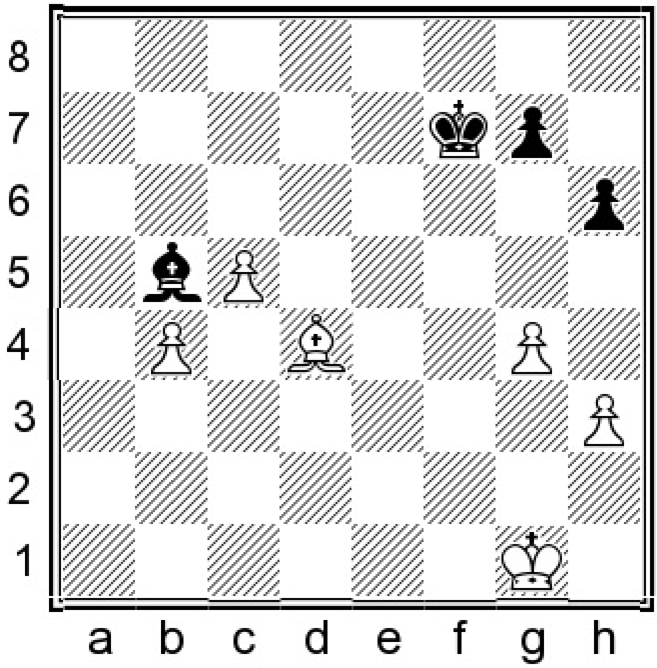
48...♔xc4 49.♔d2 ♔b4!

Three pawns are quite sufficient. 49...♔xb5? would be too greedy and after 50.♔c3! it would be impossible to queen any of the pawns.

50.♔c2 e4 51.♗g4 a4 52.♗f5 e3 53.♗e6 c4 0-1

That the great endgame specialist Andersson caught out Shirov with the bishop sacrifice idea should be a surprise to no one. Perhaps more surprising is that Andersson himself had been made to suffer a few years earlier with the same idea!

Murray Chandler 2595
Ulf Andersson 2600
Leningrad 1987



White to move

49.♗e3!!

This extraordinary prophylactic move prepares the sacrifice of the bishop four moves later. It prevents the black pawns (for one of which the bishop will be sacrificed) being moved onto light squares, which would allow Black to easily build a fortress. After any other move Black would play 49...g6 and 50...h5.

49...♔e6

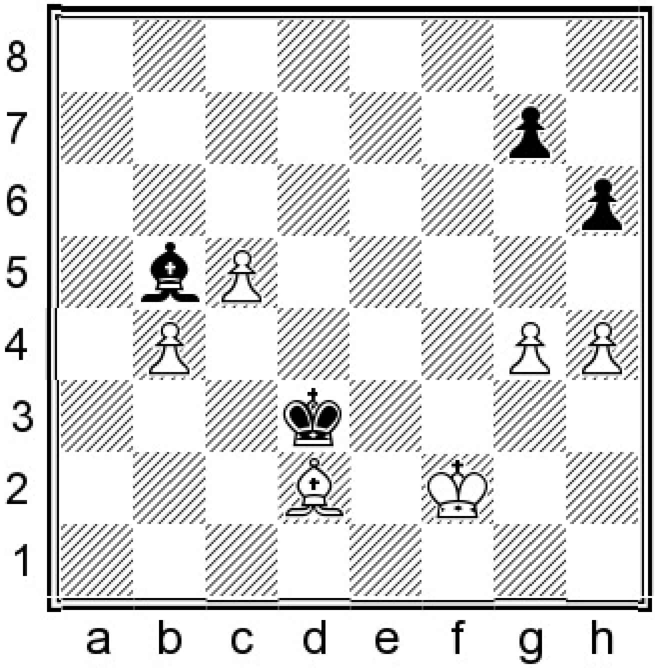
49...♔g6 prepares ...h6-h5, which cannot be prevented, but it takes the king too far from the queenside pawns: 50.♔f2 h5 51.gxh5+ ♔xh5 52.♔f3 ♔g6 53.♔e4 ♗c6+ 54.♔e5! and the white king arrives to support the passed pawns.

If 49...g5 then 50.♔f2! ♔e6 51.♔g3! (other moves win, but this follows a very clear plan: the creation of very widely separated passed pawns) 51...♔d5 52.h4+–.

50.♔f2 ♔d5 51.h4!

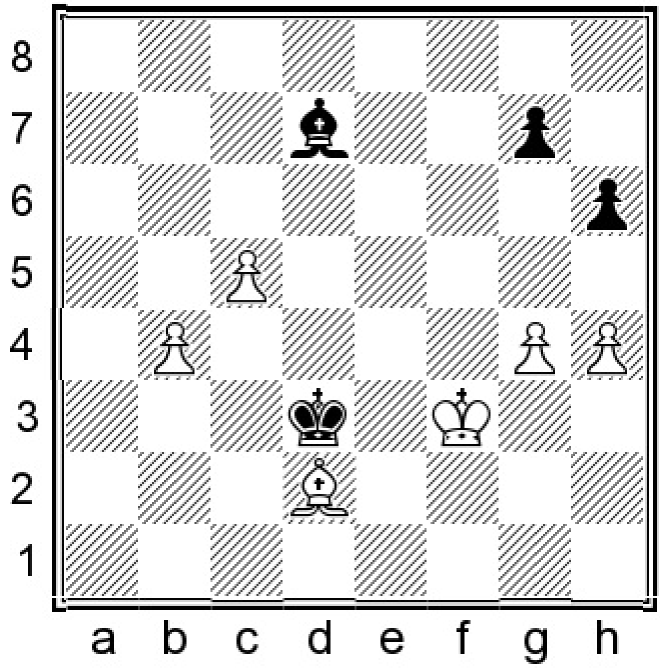
The sacrifice needs to be prepared, because the black king is about to reach c4 and then d3, gaining time.

51...♔c4 52.♗d2 ♔d3



The natural continuation, which prepares the scenario for our theme. Other moves are no better.

If 52...♗d7 53.♔f3, preparing h5, which could be followed either by ♗h6 or by other plans which are also effective. 53...♔d3



analysis diagram

54.♗xh6!! (once again) 54...gxh6 55.g5 hxg5 56.hxg5! ♔d4 (56...♗e8 57.b5! ♗xb5 58.g6 ♔d4 59.g7 ♗c4 60.c6 ♔e5 61.c7+–) 57.g6 ♔e5 58.g7 ♗e6 59.b5 ♔d5 60.b6 ♔c6 61.♔f4+–.

53.♗xh6! 1-0

Thus, Chandler seems to be the precursor of this story, but it is not impossible (in fact almost certain) that he too had a negative experience with this theme.

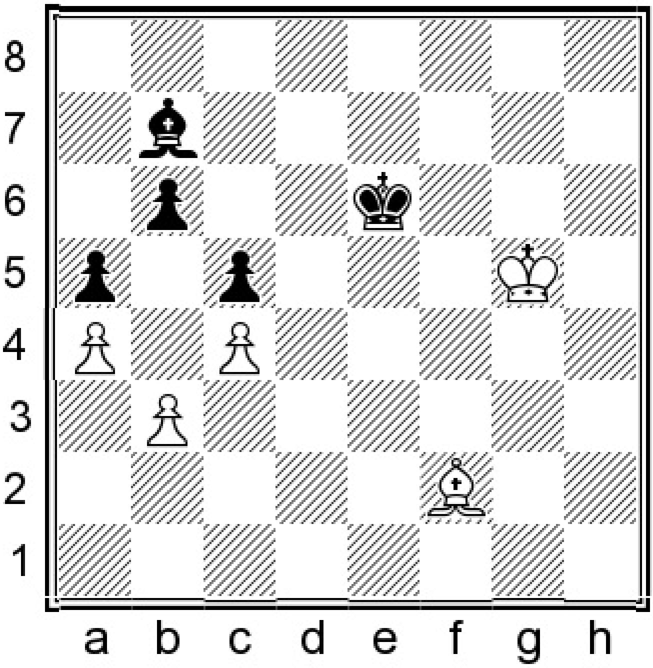
In this case too, Black resigned without allowing us to see the logical conclusion: 53...gxh6 54.g5 hxg5 55.h5 ♔d4 56.h6 ♗d3 57.c6+– with *pants*.

Pattern 49 Pawns fixed on the colour of the enemy bishop

Another of the special circumstances of endings with opposite-coloured bishops is the huge effect that the presence of pawns fixed on squares of the enemy bishop's colour can have on the evaluation of the position. In such a case, if the king is not close by, several pawns can be lost one after the other and the position falls apart. In many cases, blocking the pawn chains can make both groups of pawns vulnerable, and then everything depends on who can defend his pawns or capture his opponent's pawns most quickly.

In the first example we shall see a fairly common pawn structure.

Fernando Dellepiani 2131
Raimundo Garcia 2365
Buenos Aires 2002 (1)



Black to move

If the bishops are of the same colour as the squares on which their pawns are blocked, structures with several blocked pawns are of no interest. If the kings are close to their pawns, the defence is easy. Here though, everything depends on who can attack the enemy pawns more quickly and whether the kings are able to defend any of their own. Black, whose king is closer and who is going to move first, has the better possibilities:

49...♗e4! 50.♗g3 ♔d7

The essential difference is that the black king can defend its own pawn chain.

51.♔f4 ♗c2 52.♔e5??

Where is this king going? 52.♔e3 ♗xb3 53.♔d3 ♗xa4 and although two pawns have fallen it is still a draw.

52...♔c6!

White was not expecting this, but it is elementary. Now, all three white pawns fall.

53.♗h4

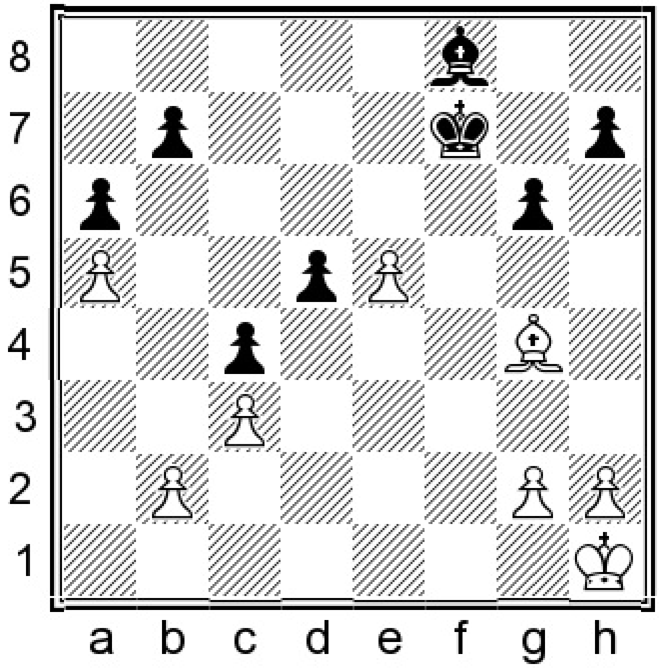
53.b4 changes nothing: 53...axb4 54.♗f4 ♗d3–+.

53...♗xb3 54.♔e4 ♗xc4 0-1

...♗b3 and ...♗xa4 will follow. Such a pawn harvest is not often seen, since players are usually more careful than that, but it is appropriate to be warned.

The following example was played at a much higher level and is much more complicated.

Viswanathan Anand 2725
Garry Kasparov 2795
New York PCA WCh 1995 (m/3; variation)



Black to move

Anand, with good judgement, avoided the exchange of queens which would have led to this position. Both players have pawns fixed on squares of the same colour as the enemy bishop and which are therefore defenceless. Black's winning chances are greater, because his king is nearer and he will be able to defend his pair of central pawns, while his bishop will eliminate the pawns at b2, c3 and a5.

34...♗c5!

The bishop has a difficult task of combining attack on the enemy pawns and defence of its own pawns (in this case it supports the advance ...b7-b6).

35.♗c8

Anand only analyses this move and we shall take it as our main line. Now the attacking race favours Black.

35.g3!?, activating the king as soon as possible, is another interesting defence.

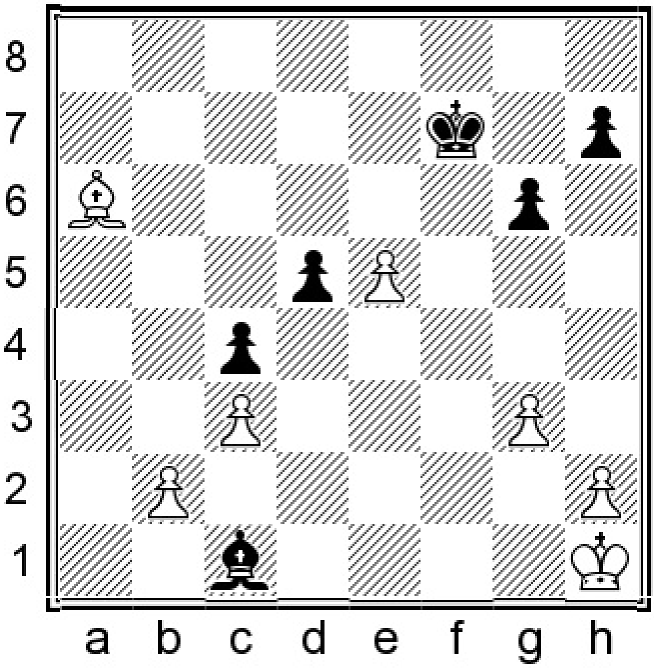
35...b6!

Or 35...d4? 36.♗xb7 dxc3 (36...d3 37.♗xa6! d2 38.♗xc4+!+− with check) 37.bxc3 ♔e6 38.♗xa6 ♔xe5 39.♗xc4 and in this variation it is White who emerges two pawns up, although this should also be a draw.

36.axb6 ♗xb6 37.♗xa6 ♗e3!

Now both queenside pawns fall, and Anand did not continue this variation any further, because it is sufficient to see the danger. In fact, though, White can save the game, but only in a way that is almost miraculous:

38.g3 ♗c1



This is one of the most curious positions of this ending. Three white pawns are all doomed.

39.b3!

With this sacrifice of a pawn which is going to be lost anyway, White is able to separate Black's two future extra pawns and achieve an effective zonal defence.

39.b4 is inferior, due to 39...♗b2!.

39...cxb3 40.♗d3 ♔e6! 41.c4! ♔xe5

With this move Black renounces having two passed pawns, but his king will support the b-pawn and pose maximum problems.

41...d4 allows the classic zonal defence 42.c5 ♔xe5 43.c6 ♔d6 44.♗e4 ♗g5 45.♔g2 ♗d8 46.♔f3 ♔c5 47.♔e2 ♔b4 48.♔d3=.

42.cxd5 ♔xd5 43.♔g2 ♔d4 44.♗b1

Now Black can even win the bishop, but he is unable to move his pawns off light squares in time. A sort of poetic justice for the white bishop, which lost the battle for the capture of the queenside pawns, but ends up better placed to attack the kingside.

44...♔e3

44...♔c3 45.h4 ♔b2 46.♗e4 ♔a1 47.h5! gxh5 (47...b2 48.hxg6 hxg6 49.♗xg6 and in this variation it is definitely important for the white bishop to capture this pawn before perishing) 48.♗xh7 (capturing a final pawn before sacrificing itself for the b-pawn, although this was not necessary, because it is a ‘wrong rook’s pawn’) 48...b2 49.♔h3 with a draw, again based on the theme of the wrong rook’s pawn.

45.h4 ♗a3 46.h5 gxh5 47.♗xh7

With a draw, even though Black wins the bishop in exchange for the b-pawn.

Chapter 8
Knight vs bishop

Knight vs bishop endings are the second-most common, after rook endings, and because the pieces involved move in such different way that they provide us with a great wealth of ideas and patterns to study.

Whenever we come across them, the eternal question comes up: which minor piece is better? The definitive answer cannot come from the statistics alone, but they always provide us with food for thought.

A quite simple statistic in MegaDatabase 2020, which anyone can replicate, gives me the following results:

If we limit ourselves to games played by players of above 2400: there are 20,597 games and the results give 50.74% of the points to the bishop.

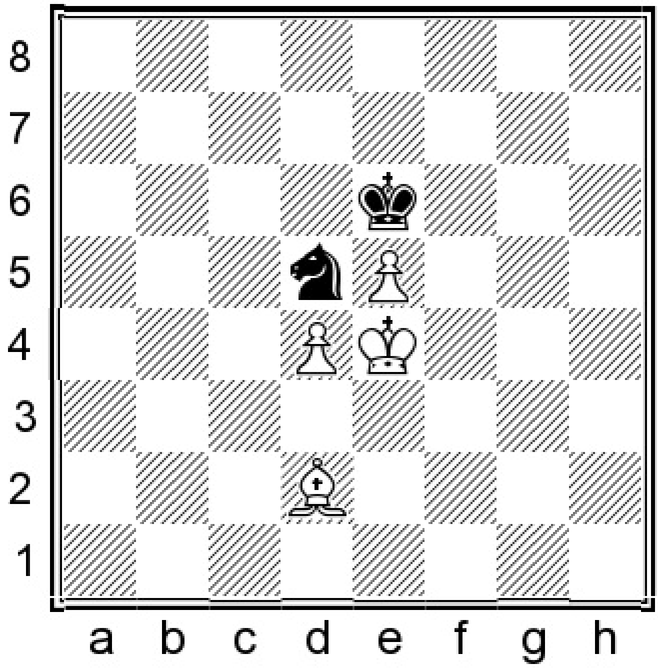
Without setting Elo limits: there are 253,423 games and 51.88% of the points go to the knight.

Some curious results, which I am sure the reader can interpret. As a Russian trainer used to say, and I must suppose that he was not the only one to have this idea: ‘We all know that the bishop is stronger, but the knight is more cunning’.

We won’t have the reply given in the story by Charles L.Harness, ‘The chess players’, either, because I fear that the valuable manuscript has been lost.

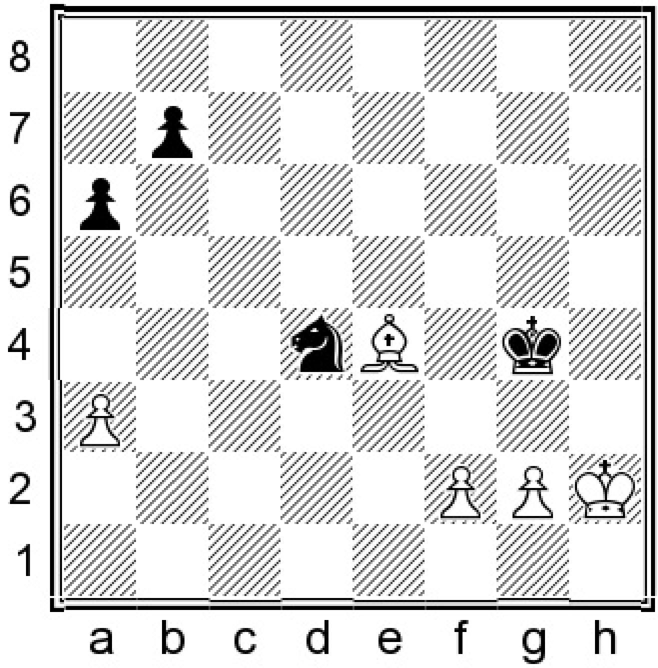
As always happens, the question can be recast into a more practical one: in which positions is the knight better, and in which positions is the bishop better? And we can certainly get closer to answering that question by studying these patterns.

Pattern 50 The blockade



The blockade is an important mechanism in all endings, as the main plan is to advance the passed pawns. The knight has the reputation of being a great blockader, partly thanks to the theories of Nimzowitsch, but in fact in the endgame the king is a better blockading piece. However, king and knight in cooperation to blockade pawns works very well when they are fighting against a bishop. The picture is very similar to the one in endings with bishops of opposite colours: the bishop cannot break the blockade, because it does not move on that colour.

Evgenij Agrest 2592
Tiger Hillarp Persson 2511
Gothenburg 2005 (1)



Black to move

White has a 2-0 pawn majority on the kingside, two healthy and connected pawns. Normally this is an automatically winning set up, but there are three factors working against White here:

1) Black has a potential passed pawn on the queenside, which will allow him to deflect the white pieces;

2) the white king is a long way away from the queenside; and

3) the pawns are very backward.

With these three factors combined, energetic play by Black can being about a blockade by force. The first step is to advance the queenside pawns until a passed pawn is created.

49...b5 50.g3 a5! 51.♔g2

White prepares to play f2-f3+ and send his king to the queenside.

51...b4 52.f3+ ♔g5 53.axb4 axb4 54.♔f2 b3 55.♔e3 ♘b5!?

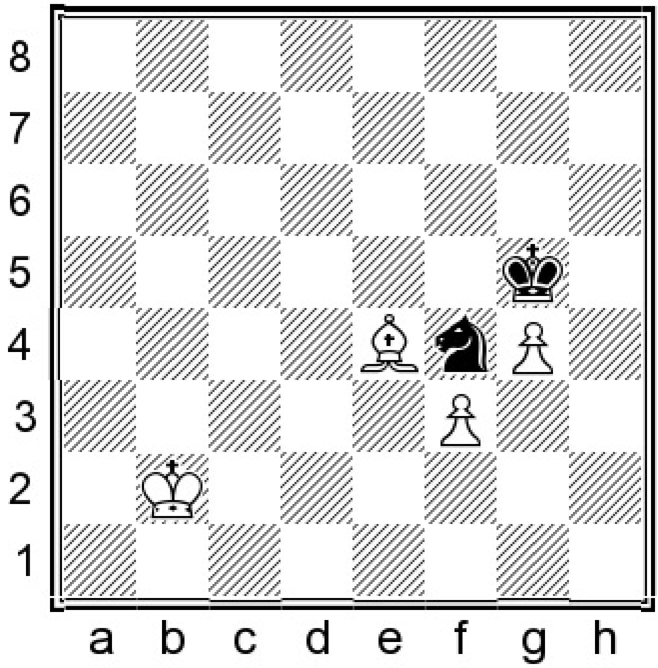
Counting on the sacrifice of the pawn.

55...♘e6! also allows the construction of a blockade, since f3-f4+ does not work: 56.♔d3 (56.f4+ ♔g4!=) 56...♘g7 57.♔c3 ♘h5! 58.g4 ♘f4, with a blockade.

56.♔d3 b2 57.♔c2 ♘d4+ 58.♔xb2 ♘e2

Attacking the pawn which is on a dark square and forcing it to advance.

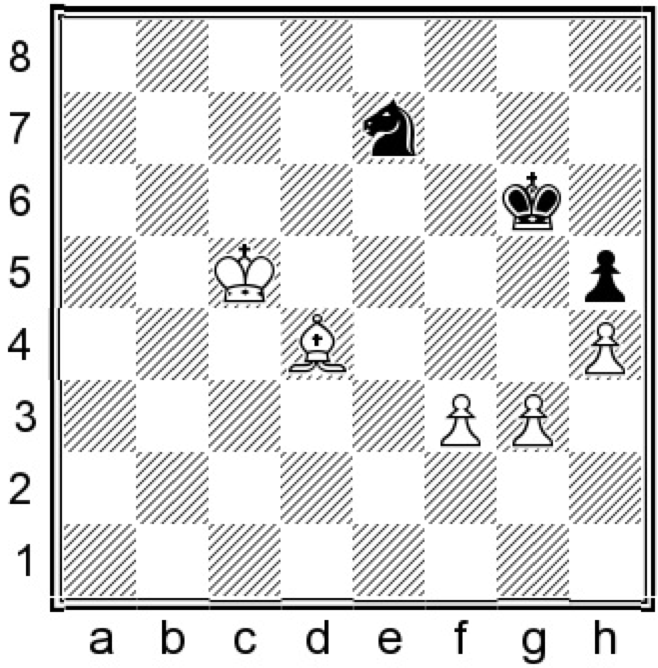
59.g4 ♘f4



And Black has set up an insuperable blockade, although White tried fruitlessly to make progress for a further ten moves.

Observation: If the defender's knight and king can coordinate to control two blockading squares, on the opposite colour to the bishop, they can easily stop two passed pawns, even when the pawns are connected. But it is interesting to observe that there are exceptions, owing to zugzwang.

Patrick Richardson 1875
Alon Risdon 1910
cr 2008



White to move

With two healthy extra pawns, White should win easily, but he rushes and ends up in a blockaded position:

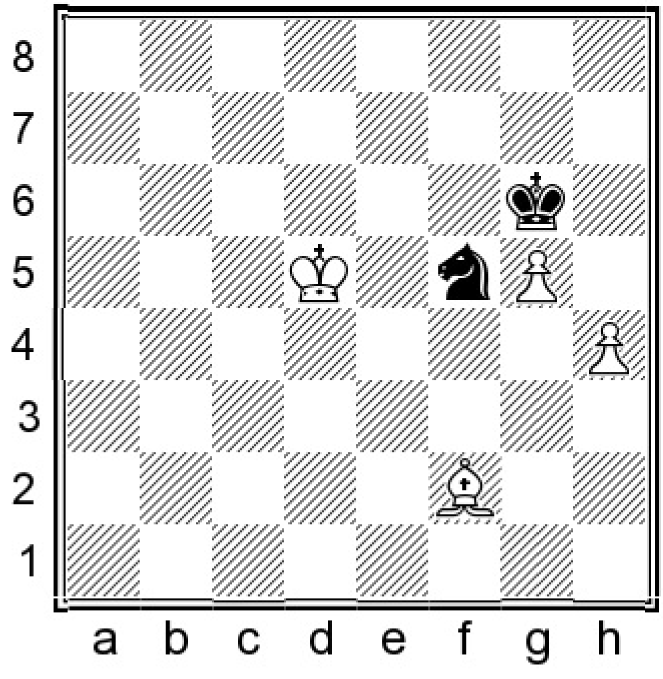
53.g4?

53.♗e3! would really be threatening 54.g4, followed by the approach of the white king, and this should win easily; then if 53...♘g8? 54.♗g5! and we see our first example of **Pattern 52** – Domination. If 53...♔f5, hindering the push, then after 54.♔d6 ♘g6 (54...♘c8+ 55.♔d7) 55.♗d4! there is another case of domination – 55...♘f8 56.♔e7 ♘g6+ (56...♘e6 57.♗b6 ♘g7 58.♔f7 ♘e6 59.f4!) 57.♔f7 ♘h8+ 58.♔g7! (58.♗xh8 is stalemate) 58...♘g6 59.♗f6 ♘h8 and now 60.g4+.

53.g4? hxg4 54.fxg4 ♘g8!

This excellent move could easily have been overlooked, since backward moves are one of the blind spots of most players. Black threatens 55...♘h6 and if White prevents it with 55.♗e3 then the knight makes the same attack from f6.

55.♔d5 ♘h6 56.g5 ♘f5 57.♗f2



57...♔h5!

Applying the right blockade. 57...♘g7?! 58.♔e5 ♘h5? would be wrong, since the knight can run out of squares and lose by zugzwang: 59.♗c5 ♘g7 60.♗e7! (60.♔e4 ♔h5 61.♗f2 ♘e6 62.♔f5 ♘xg5=) 60...♘h5 61.♗f8 ♘g3 62.♔f4 ♘h5+ 63.♔g4.

Observation: The blockade by the knight and the king on squares of the opposite colour to the bishop can fail if the knight's blockading square is on the edge of the board, because then zugzwang is more likely.

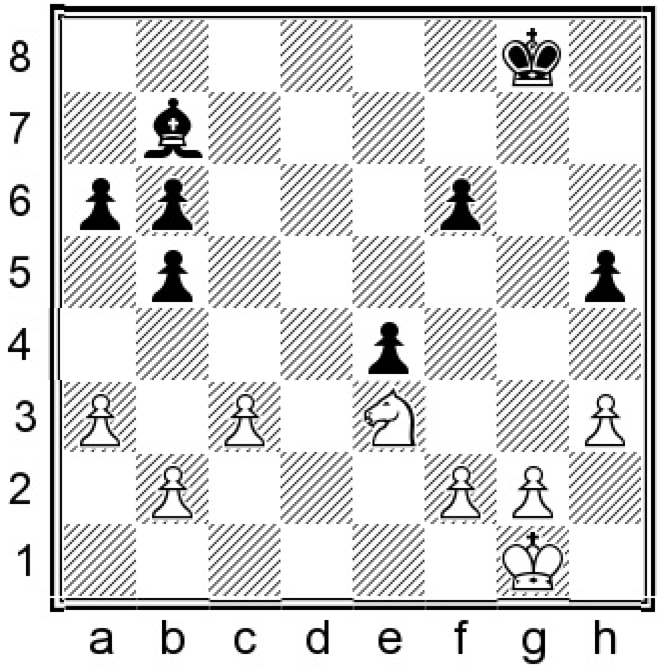
58.♔e4 ♔g6 59.♔e5 ♘e7 60.♗e3 ♔h5 61.♔e6 ♘g6

This blockade position is unbreakable.

62.♗f2 ♘f4+ 63.♔f6 ♘g6 ½-½

We have already observed that the blockade is a consequence of the bishop's inability to control squares of the opposite colour. Not only does this enable an opposing majority to be stopped, it can also act as a starting point for the exploitation of weaknesses.

Emanuel Berg 2503
Thomas Ernst 2471
Skara 2002 (11)



White to move

In this case the position of the pawn on e4 condemns the bishop to ineffectiveness and restricts Black to a laborious and prospectless defence.

34.♔h2!

The white king has discovered a *highway* along the dark squares.

34...♔f7

Sometimes the advance of the king can be prevented with moves like 34...h4?, but this rarely works in the struggle of knight against bishop, because each advance of a pawn to a square of the opposite colour to the bishop seriously weakens it: 35.♘f5+–.

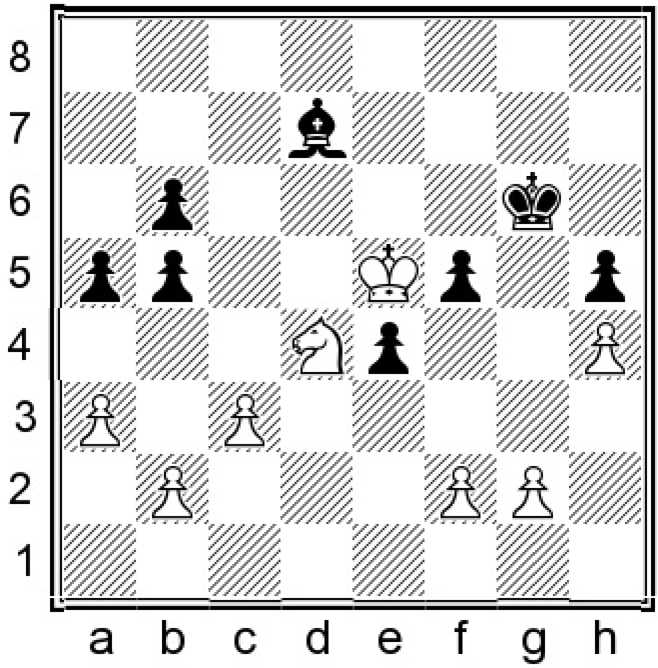
35.♔g3 ♔g6 36.♔f4 ♗c6

White's king and knight occupy the typical blockading squares, but unlike positions where the knight has to control a passed pawn, here the white knight can manoeuvre to attack the enemy weaknesses.

37.♘f5 ♗d7 38.♘e3

White is in no hurry to capture the pawn on e4. He prefers to force Black to weaken e5 and then advance his king further.

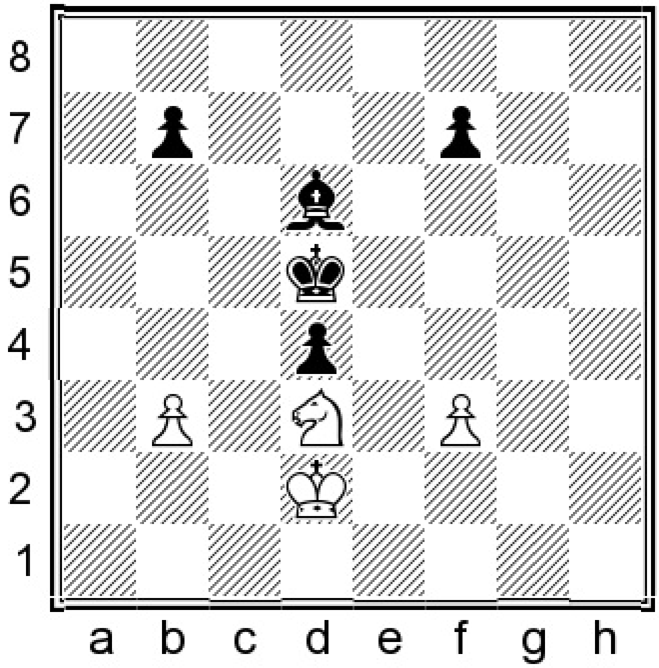
38...♗c6 39.h4! a5 40.♘f5 ♗d7 41.♘d4! f5 42.♔e5!



This is the position which White was aiming for. White's total domination of the dark squares will quickly lead to the win of several pawns.

Pattern 51 The barrier

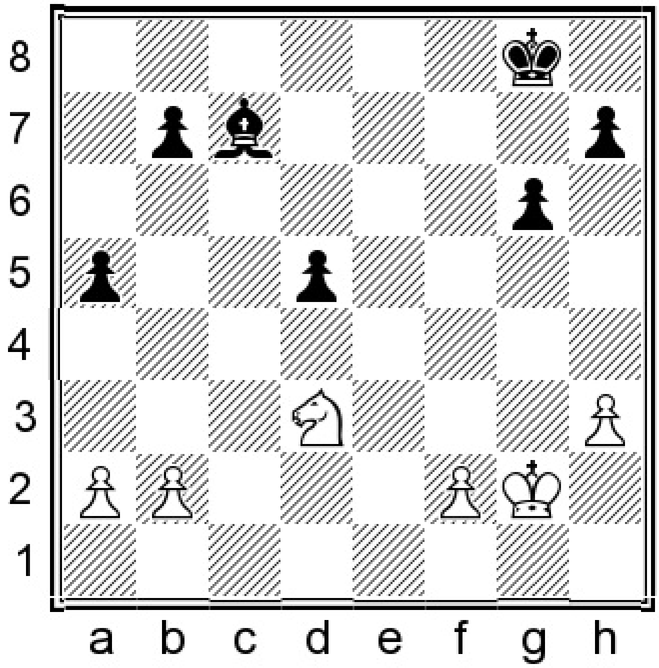
This is a theme we have also seen in the knight vs pawns section. Logically it also works in knight vs bishop, again because the bishop can only control squares of one colour.



We shall limit ourselves to just a few examples of very simple analysis, but in which the concept works very forcefully.

We shall begin with a position which even the best engines running to a great depth evaluate as winning.

Liviu-Dieter Nisipeanu 2678
Mikhail Gurevich 2656
Aosta 2004 (7)



White to move

Soon we shall see a section in which the bishop aspires to win in a position with equal pawns, when the centre is completely cleared of pawns. So if we have an open position and an extra pawn, surely it should be easy! In fact, it is easy, but only to draw. Why? First of all, the extra pawn is the passed pawn in the centre, which is less useful because it lacks the potential to divert the opposing king. Secondly, and most significantly for our analysis, the knight and two of the white pawns can create a *barrier*, which the black king cannot overcome:

35.b3! ♔f7 36.f3!

The knight and the two pawns which have just advanced create a barrier. It is curious that the barrier is not complete (it does not cover the squares on the d-file), but the black pawn on d5 obstructs the only entry for the black king (otherwise the white king would have to carry out that task)! It is easy to conclude that in this case, Black would have greater winning chances without that pawn, and if the pawn were on d7 he would surely win.

The barrier concept is one that the engines still fail to understand. Stockfish 12 at depth 60 still sees a decisive advantage for Black (specifically +3).

36...♔e6 37.♔f1

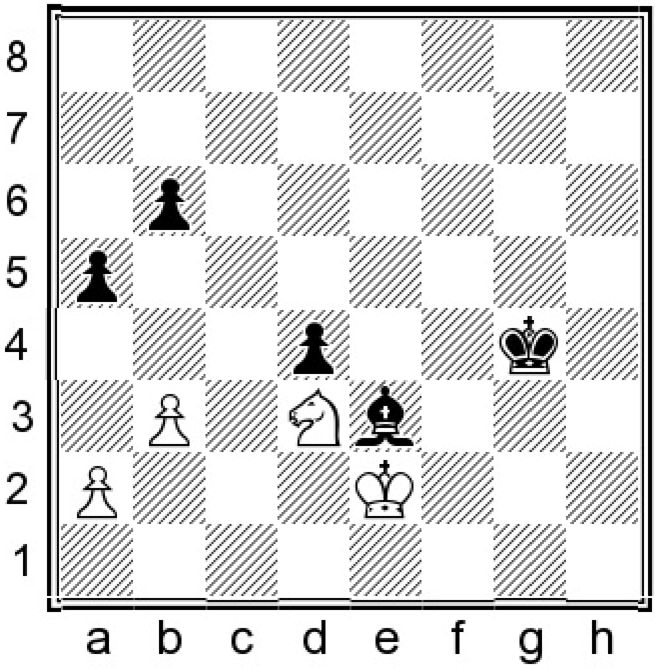
Now we can see that without the black pawn, the black king could take up a dominant position and finally enter the white position via ...d5-d4. We now enter a long and boring phase of waiting tactics.

37...♗d6 38.♔e2 ♔f5 39.♔f2 ♗b8 40.♔f1 ♗g3 41.♔g2 ♗h4 42.♔f1 h6 43.♔g2 ♗d8 44.♔f1 ♗c7 45.♔g2 ♗d6 46.♔f1 ♔f6 47.♔f2 ♔g5 48.♔f1 ♔f5 49.♔g2 g5

Black prepares the pawn break on g4, which is the only one possible, since ...b7-b5 followed by ...a5-a4 is met with the same waiting strategy by White, who only needs to keep a pawn on b3 to preserve the barrier.

50.♔f1 b6 51.♔g2 ♗c5 52.♔f1 ♗d4 53.♔g2 ♗e3 54.♔f1 ♔e6 55.♔e2 ♗g1 56.♔f1 ♗e3 57.♔e2 d4 58.♔f1 h5 59.♔g2 h4

The pawn advances one step further, preparing ...g5-g4, making use of tactical ideas. The other system, 59...♔f5 60.♔f1 g4 61.fxg4+ hxg4 62.hxg4+ ♔xg4 63.♔e2...

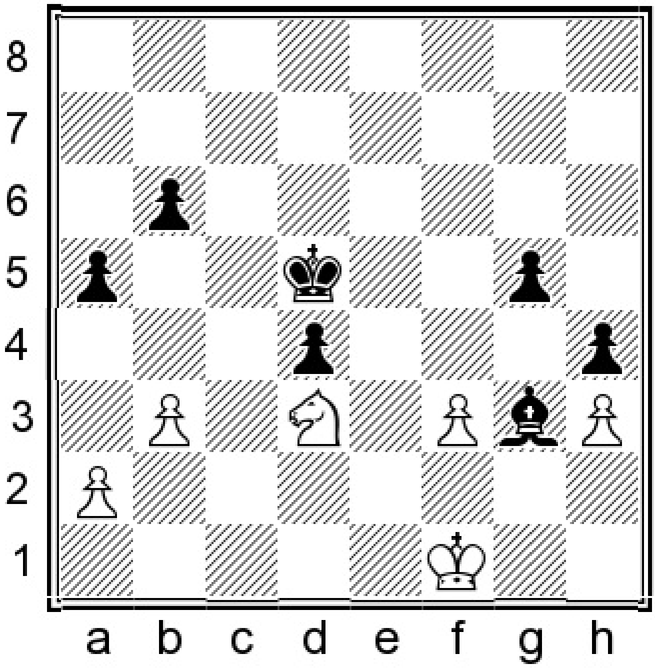


analysis diagram

leads to a position in which White can easily maintain the blockade of the d4-pawn and the barrier of knight and pawn on the queenside.

60.♔h1 ♚d5 61.♔g2 ♝f4 62.♔f2 ♝d6 63.♔e2 ♝g3 64.♔f1

With this, White has moved the king twenty-eight times in succession.

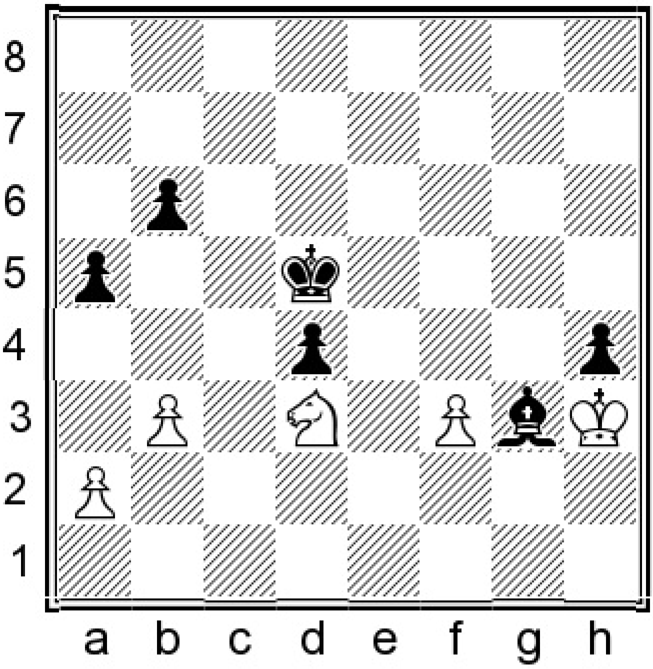


64...g4!?

Finally. An interesting attempt from the practical point of view, but White can hold easily:

65.fxg4!

Logical and good enough to draw, but if losing control of the e4-square scares you, White has a continuation which is more consistent with his previous play and which also draws. Not 65.hxg4?, which allows the creation of a dangerous second passed pawn: 65...h3! 66.♔g1 ♔e6 67.♔h1 ♔f6 (the king threatens to penetrate via g5-h4) 68.f4 ♔e6! and now the king will enter via d5-e4. The other way to draw is 65.♔g2! gxh3+ 66.♔xh3

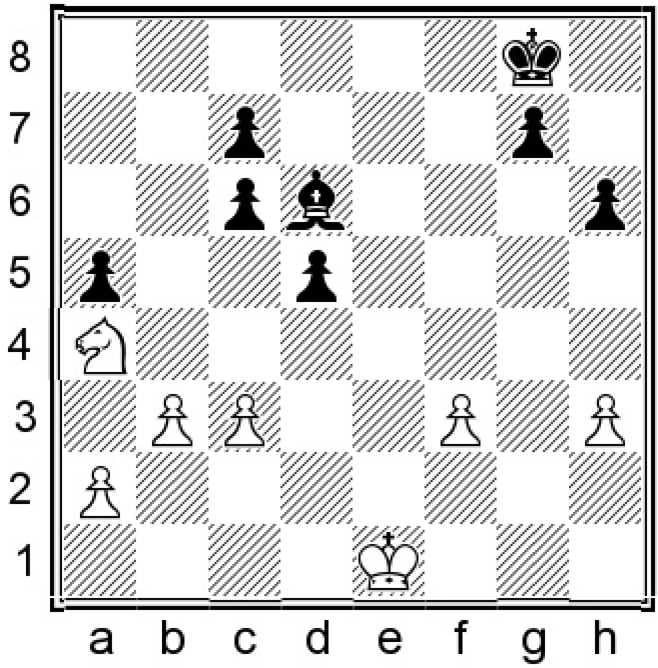


analysis diagram

which produces a truly marvellous barrier. All the squares on the fourth rank are controlled by the white pieces or occupied by black pawns. The black pieces can do nothing to force either the knight to move from d3 or the white pawns to leave their present squares (only the pawn on a2 will have to recapture on b3 eventually). White draws by playing ♔h3-♔g2 indefinitely.

65...♔e4 66.♔e2 ♗d6 67.g5 ♗e7 68.g6 ♗f6 69.♘e1 ♔f4 70.♔f2 ♗g7 71.♘d3+ ♔e4 72.♔e2 ♗h6 73.♘e1 ♔f4 74.♔f2 ♔g5 ½-½

Hrvoje Stevic 2607
Alexei Shirov 2749
Khanty-Mansiysk ol 2010



Black to move

Black has an extra pawn, but the structure is very irregular. In fact Black can win only because he is able to apply the theme of *domination*:

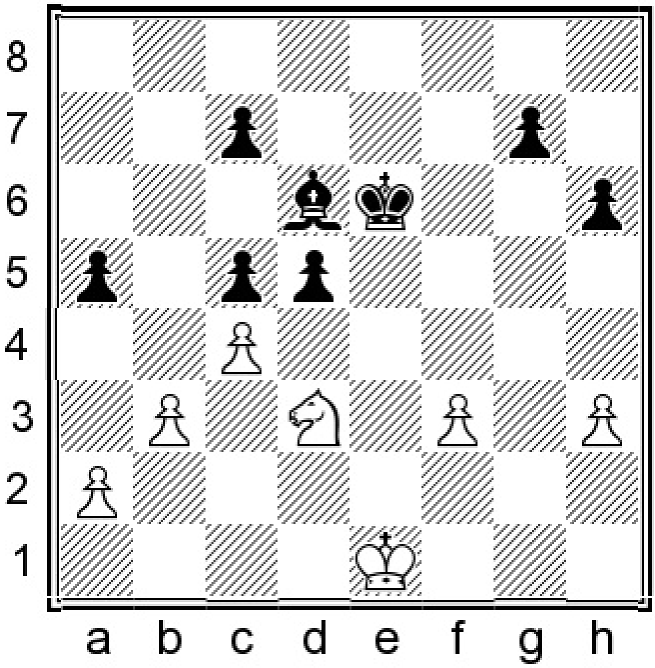
29...♔f7?

A natural move, improving the king, but ignoring what White is going to do now. The winning move was 29...♗a3! with domination. The knight cannot move without being exchanged. Therefore Black wins.

29...♔f7? 30.♘b2! ♔e6 31.♘d3

The coordination between the knight and the pawns is impressive, but it is the same as we saw in the previous example. The knight, together with the pawns on b3 and f3, forms a wide barrier which covers almost the whole board. Infiltration on the right must be policed by the king. The presence of doubled pawns on the c-file is a decisive factor, because it prevents Black from displacing the knight.

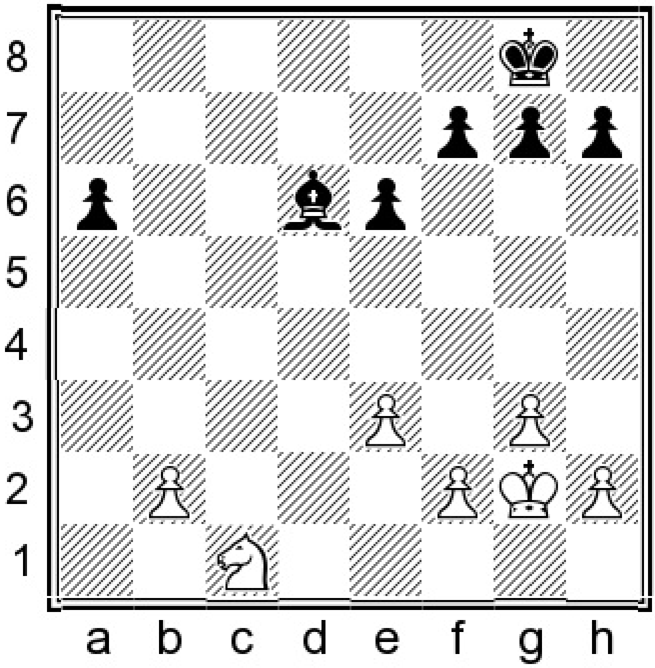
31...c5 32.c4!



The knight creates a barrier, together with the pawns at b3, c4 and f3. Furthermore, from the square d3, from which it cannot be displaced, it blocks Black's passed pawn. Entry via h4-g3 is easily prevented by the white king from g2. All attempts are futile. Black tried to win for a further thirty moves, without success.

We shall now present a very simple example, which will serve to introduce the theme of **Pattern 57** – No central pawns.

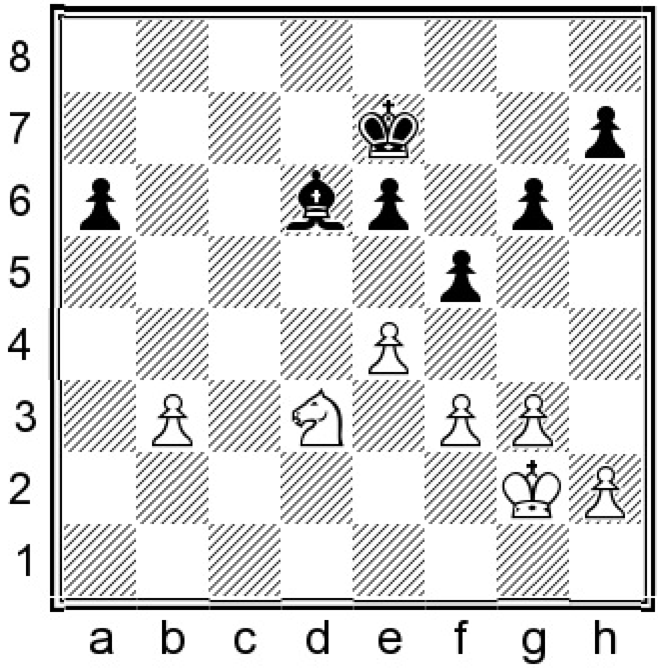
Johan Hellsten 2471
Matthew Sadler 2631
Germany Bundesliga 2001/02 (1)



White to move

Black seems to have some winning chances in this ending, with pawns on both wings and the centre cleared, but White erects a barrier and offers a draw:

30.♘d3! f5 31.f3 ♔f7 32.e4! ♔e7 33.b3 g6 ½-½

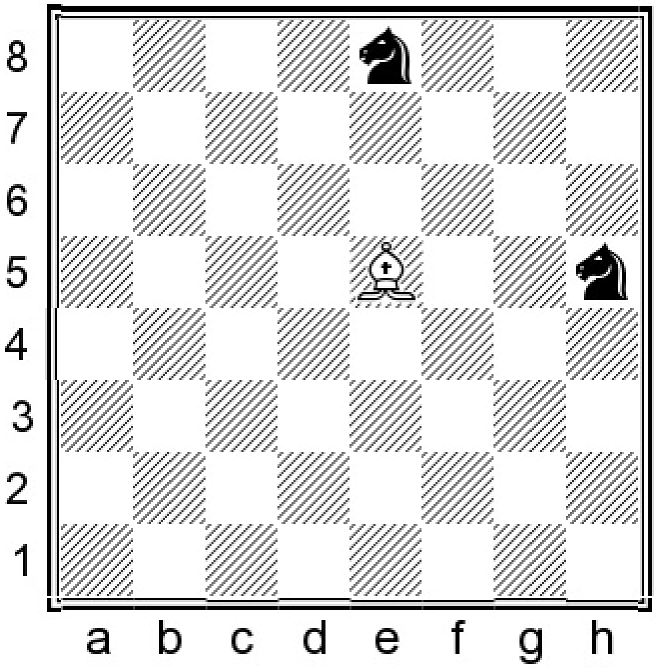


Pattern 52 Domination

Domination is a direct consequence of the way the two types of minor pieces move.

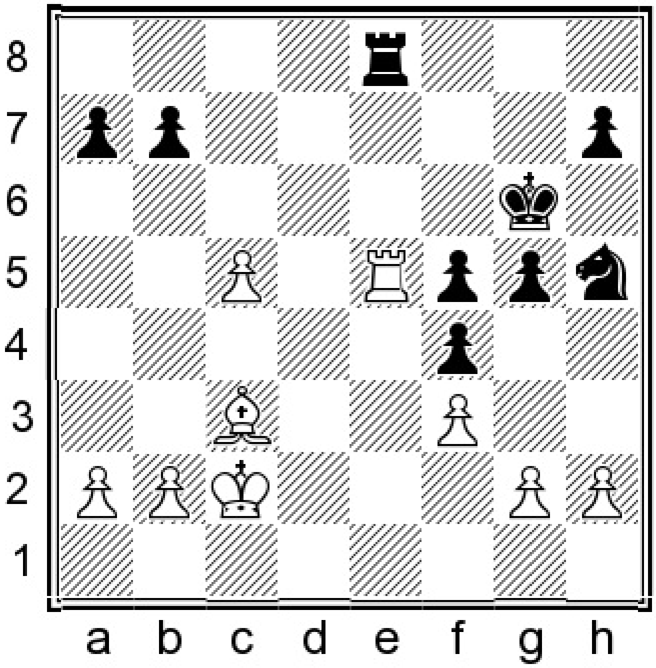
A bishop, situated three squares away from a knight on the same line (rank or file), controls all the knight's approach squares.

If the knight is on the edge, the bishop dominates its four possible moves.



In the above diagram, the white bishop dominates all the squares to which the two black knights can move.

Bobby Fischer
William Addison
Cleveland ch-USA 1957 (11)



Black to move

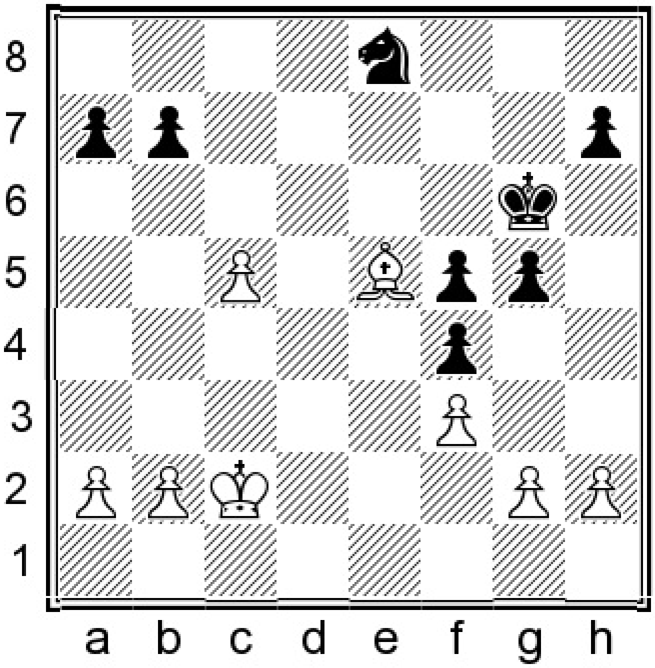
This famous game by Fischer is one of the most graphic examples of domination in tournament practice. Black has several options, the majority of which lead to the domination of the knight:

27...♘f6

27...♖xe5 28.♗xe5 leaves the knight dominated and 28...♘f6 results in a lost pawn ending after 29.♗xf6! ♔xf6 30.♔d3+–.

It is always better to retain the rooks, if only for practical reasons: 27...♖c8!? 28.b4! ♘g7 29.♖e7 ♘e8 30.♗e5! and here too the knight is dominated.

27...♘f6 28.♖xe8 ♘xe8 29.♗e5!



The epitome of the dominated knight, which we have already seen in the schematic diagram at the start of this theme. Sometimes, for the domination to be effective, it is necessary for the exchange of the knight to lead to a losing pawn ending for the side with the knight, as is the case here.

29...♔h5

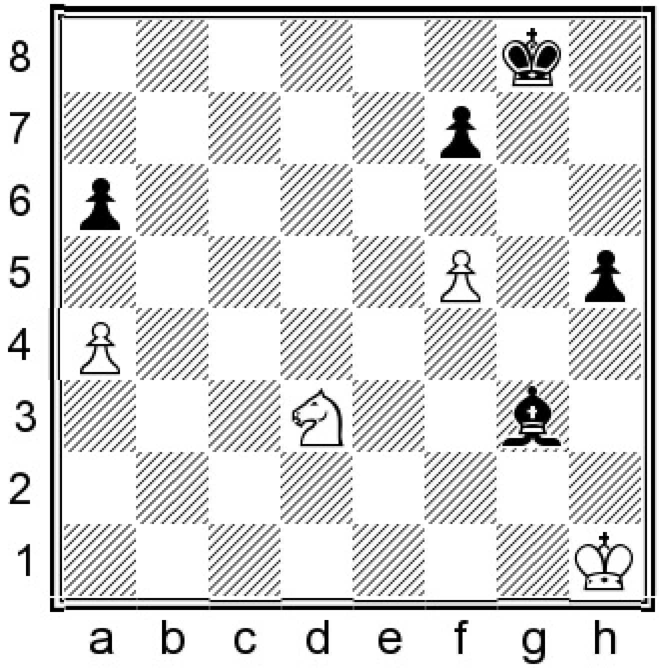
Black tries a counterattack. If 29...♔f7 30.♔d3 ♔e6 31.♔d4!+–.

30.♔d3 g4 31.b4! a6 32.a4 gxf3 33.gxf3 ♔h4 34.b5 axb5 35.a5! ♔h3 36.c6 1-0

The a-pawn queens.

In the next example, the domination theme remains latent for several moves, until it finally appears on the board.

Peter Leko 2555
Jordi Magem Badals 2505
Pamplona 1993 (3)

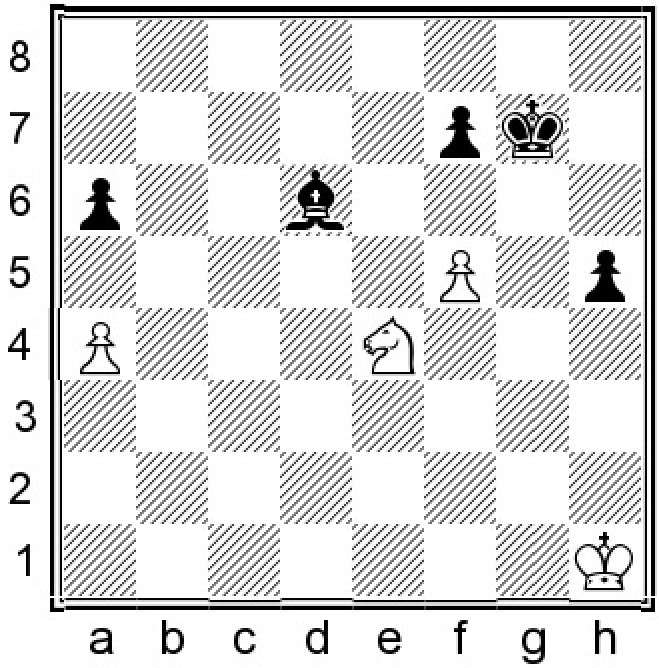


Black to move

Despite the extra pawn, the difficulties Black must confront in order to win are great: there is little material left, the h-pawn is the wrong colour, and separated pawns usually favour the knight. With the f5-pawn (very weak in its present position) further back, for example on f3, White would not lose. Positions with domination or barriers recur in the analysis.

38...♔g7!

Black dodges the first problem: 38...♗d6?! 39.♘f2 ♔g7?! 40.♘e4...



analysis diagram

would lead to the construction of a barrier which would be difficult to breach: 40...♗e7 41.♔g2 ♔h6 42.♔g3 a5 (42...h4+?! 43.♔g4! and there is nothing to be done, not even by sacrificing the h-pawn) 43.♔h3 and Black has made no progress.

38...♔g7! 39.♘c5

White appears to be threatening the a-pawn, but the real threat is the construction of the barrier. Black does not fall for it:

39...h4!

Opening a way for his king towards the g4-square. Instead, 39...♗d6? seems a great idea, since if the knight captures on a6, it will be dominated, but instead White can play 40.♘e4! with a barrier and almost a draw.

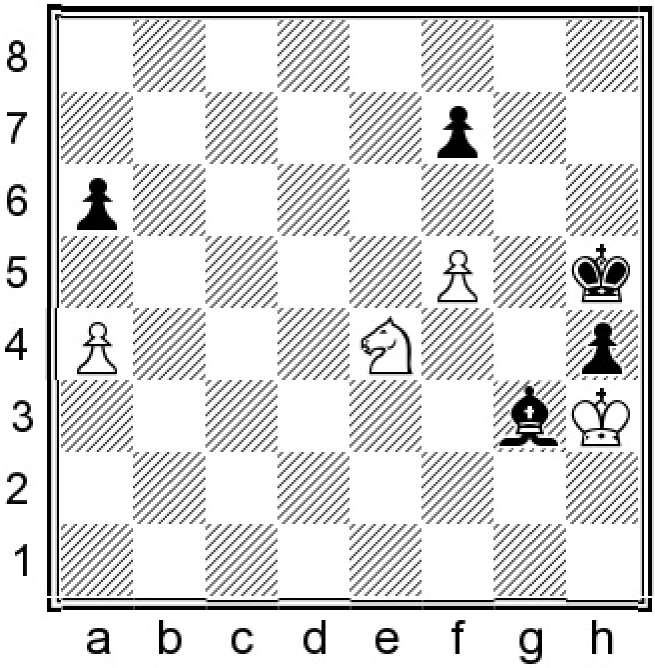
40.♘e4!

40.♘xa6? would still be a mistake due to 40...♗d6 with domination. This is one of the many variations in which we see that the knight cannot capture on a6 and, by extension, that any knight which captures a pawn on the edge of the board can be immediately dominated.

40...♔h6!

The king hurries towards g4.

41.♔g2 ♔h5 42.♔h3



We have reached a key position, very similar to the barrier examples in the previous notes. It seems that the game has become completely bogged down, but there is an important difference from previous variations: the white king has not made it to g4 and White is now in zugzwang.

42...♗c7

Other moves with the bishop also create zugzwang. If the white king moves, the black king goes to g4, while if the knight moves, White loses control of the g5-square.

43.♘d2

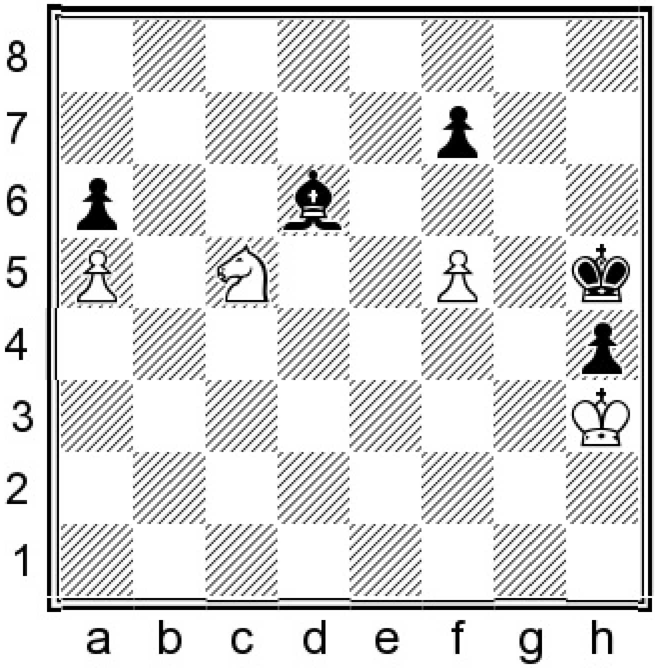
Or 43.♘c5 ♔g5 44.♘xa6? ♗d6, with domination.

43...♗f4 44.♘e4 ♗g3!

And now the black king is threatening to go to g5 and capture the f5-pawn without losing any of his own pawns.

45.f6

The pawn becomes weaker. Instead, 45.a5?! loses the a-pawn and the idea of winning the a6-pawn in exchange meets with a very precise manoeuvre which exploits the domination theme: 45...♗c7 (hoping to win the pawn for free) 46.♘c5 (to exchange it) 46...♗d6!



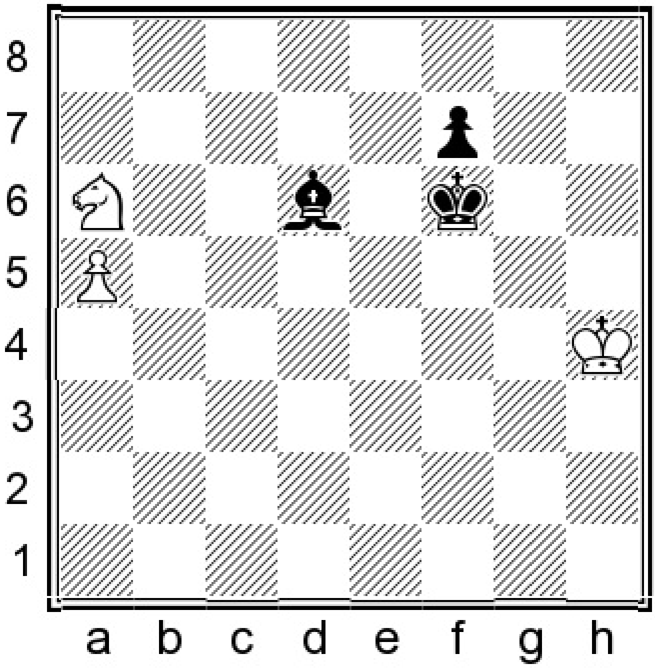
analysis diagram

47.♘e4 (47.♘xa6 f6 once again with domination) 47...♗b4 and Black wins the pawn for nothing.

45...♗e5 46.a5 ♗g3 47.♘c5 ♔g5 48.♘e4+ ♔f5 49.♘c5 ♔xf6 50.♘xa6

White has long avoided making this move, but finally he succumbs and rests his hopes on the scarcity of pawns left on the board.

50...♗d6 51.♔xh4



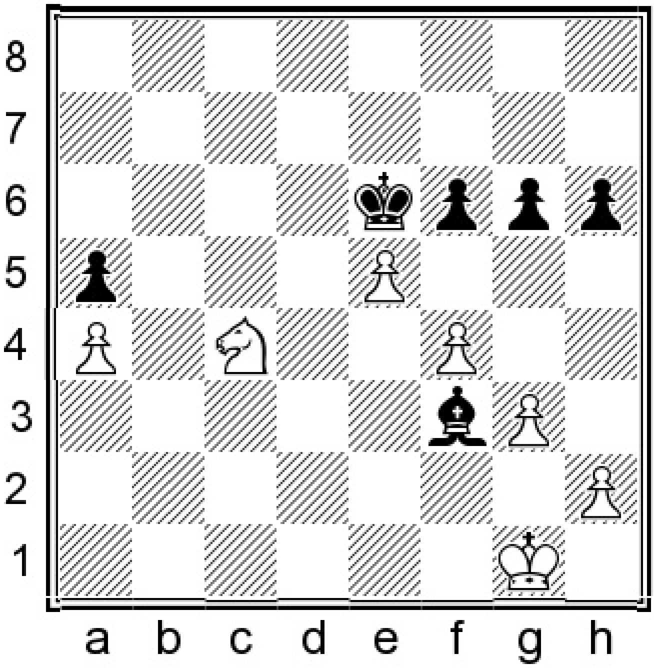
There is just one black pawn left, but that hardly presents any difficulty, since White is, in effect, a knight down.

51...♔f5 52.♔h3 ♔f4 53.♔g2 ♔e3 54.♔f1 ♔f3 55.♔e1 ♔e3!

The only moment in which Black needs to exercise a modicum of care; here, 55...♔g2 would have given White time to save his knight with 56.♔d2 f5 57.♔c3 f4 58.♘b4=.

56.♔d1 ♔d3 57.♔e1 ♔c4 0-1

Cristian Atipov 2009
Oscar Torcal Miguel 2024
Benidorm tt jr 2019



Black to move

White has an extra pawn and is even attacking another one. This should be enough for him not to lose.

38...♗d5!

This brilliant move highlights what we have already seen in the previous example. Sometimes the knight's attack on a rook's pawn is not really a threat. Now the knight must move and make a critical choice, although really both options should be sufficient to draw:

39.♘xa5

Now the knight will be dominated and White faces more difficult continuations. 39.♘b6 requires White to calculate the pawn ending accurately and very often this creates a certain insecurity: 39...fxe5 40.♘xd5 ♔xd5 41.♔f2! exf4 42.gxf4 ♔c4 43.♔g3 ♔b4 44.♔g4 ♔xa4 45.h4 ♔b3 46.h5 gxh5 47.♔h5= as the pawns queen at the same time.

39...fxe5 40.fxe5?

It is natural not to want to weaken the pawns, but in this case it was more important not to facilitate the advance of the black king. 40.♔f2! still drew: 40...exf4 gxf4 ♔f5 42.♔e3! (42.♔g3? h5! 43.h3 h4+ 44.♔xh4 ♔xf4, producing a comical situation; White has to move the knight, but Black need not capture it; mate in two is unavoidable) 42...h5 43.♔d4 and the knight receives help.

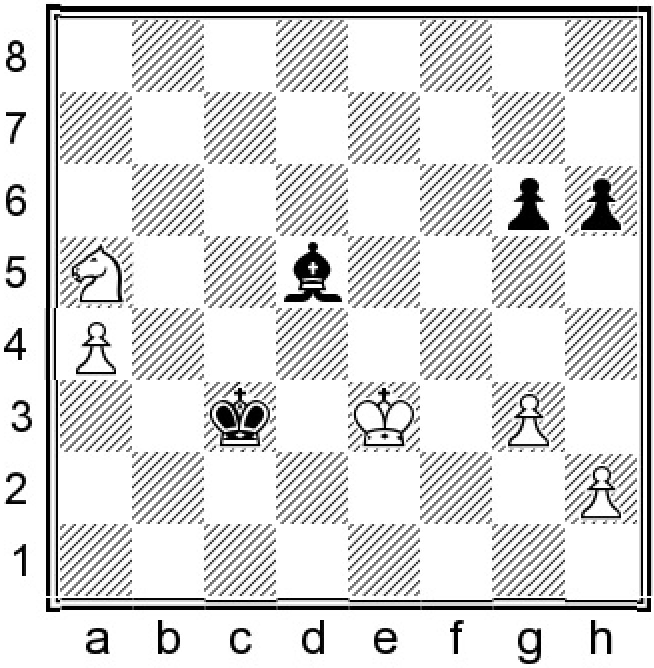
40...♔xe5 41.♔f2 ♔d4

The black king heads to capture the knight and White's hopes are reduced to exchanging all the pawns.

42.♔e2 ♔c3!

42...♔c5? 43.♔d3=.

43.♔e3



43...♗g2

The only finesse needed. The bishop can move, because the two squares that it ceases to dominate are still controlled by the king. Not 43...♔b4? 44.♔d4, and the knight receives help.

44.♔f4 ♔b4 45.h4 ♔xa5 46.g4 ♗c6 47.h5 gxh5! 48.gxh5 ♗e8 49.♔f5 ♗xh5 50.♔f6 ♗f3

White resigned.

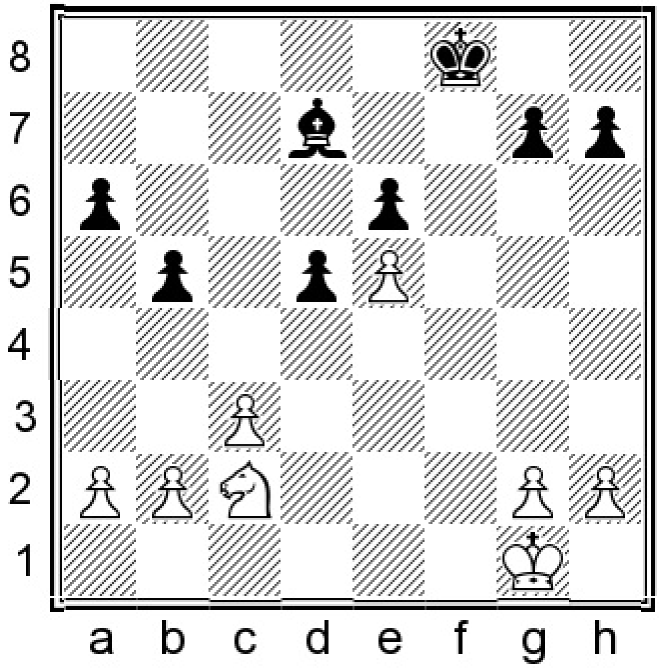
Pattern 53 The bad bishop

We have already come across this theme in bishop endings. The concept of the *bad bishop* is very popular. And we already defined it there: it is a bishop which has its own pawns fixed on squares of its own colour. It is more difficult to determine the circumstances in which this is decisive for the result of the game.

There are two disadvantages to the bad bishop: the first is that it has a purely defensive task with respect to the pawns, but the second is usually more important: it does not guard the enemy king's entry squares. As regards the struggle against a knight, this theme is studied in depth in Jan Timman's book *Power Chess with Pieces*, which we recommend to readers who wish to go more deeply into it.

The first example is very old and well-known, but as a basic example it is hard to find a better one.

Nikolay Zubarev
Alexandr Alexandrov
Moscow 1915



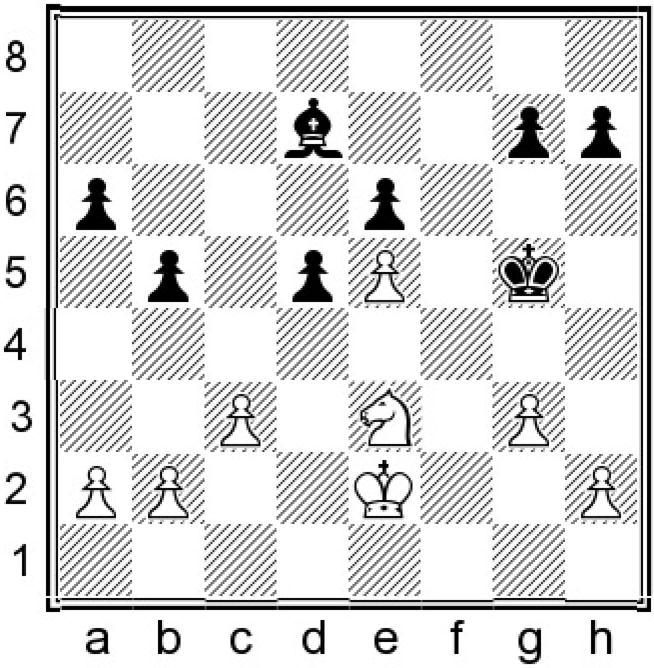
White to move

1.♔f2

The white king takes advantage of the *highway* of dark squares and heads quickly towards c5. Black is unable to prevent this:

1...♔e7

1...♔f7 is a logical counter-attempt, which White can neutralise economically by constructing a barrier: 2.♔e2!? (2.♔e3?! allows some counterplay, although it should still win: 2...♔g6 3.♔d4 ♔f5 4.g3 (with the idea ♘e3) 4...♔g4) 2...♔g6 3.♘e3! ♔g5 4.g3!.



analysis diagram

White has erected an impenetrable barrier on the kingside and now his king will invade the other wing unopposed.

2.♔e3 ♔d8 3.♔d4 ♔c7 4.♔c5

The king has reached c5 and Black can only mark time with the bishop. The time has come for White to create another weakness. He has many ways to do this, but the most natural is to attack the only black pawn on a dark square (g7).

4...♗c8 5.♘b4 ♗b7 6.g3 ♗c8 7.♘d3 ♗d7 8.♘f4

Threatening 9.♘h5 and 10.♘f6.

8...g6 9.♘h3!

Now the threat is 10.♘g5.

9...h6 10.♘f4 g5 11.♘h5

Now the knight heads for f6 and after fixing the pawn on h6 he plans to capture it with ♘g8.

11...♗e8 12.♘f6 ♗f7 13.♘g4!

White continues with his strategy of provoking pawn advances to weaken the black position as much as possible, which makes this game a classic in the analysis of this type of ending.

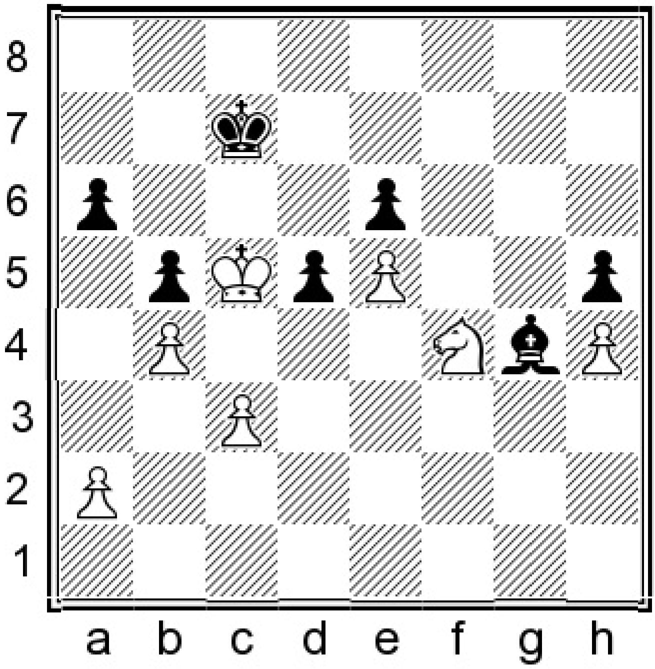
13...h5 14.♘e3?!

A slight inaccuracy, which lengthens the process. Instead, after 14.♘f2! ♗g6 15.♘h3 g4 16.♘f4 ♗f7 17.b4! the zugzwang is total.

14...♗g6 15.h4 gxh4 16.gxh4 ♗e4

Preventing the manoeuvre ♘g2-f4 and forcing White to manoeuvre more laboriously with the knight. But we shall observe that the flexibility of the knight will always triumph in this type of situation and resistance is futile.

17.♘f1 ♗f3 18.♘d2 ♗e2 19.♘b3 ♗g4 20.♘d4 ♗h3 21.♘e2 ♗f5 22.♘f4 ♗g4 23.b4

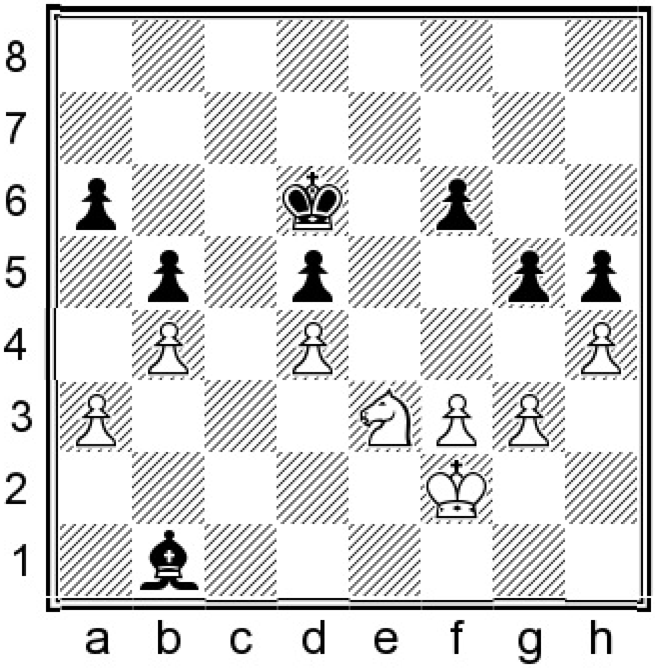


Much later, but once again, absolute zugzwang.

23...♔d7 24.♔b6 ♗f3 25.♔xa6 ♔c6 26.♘xe6 1-0

The following game is probably the most famous example of the bad bishop, for its impact and for the brilliance of White's 47th move. Even so, Black was able to convert this example into one for the following section 'The counterattack by the king with the bad bishop'.

Anatoly Karpov
Garry Kasparov



Black to move

There is no doubt that Black's bishop is 'bad' in theoretical terms, mainly because the pawn on d5 is fixed on a square of its colour, but the three pawns at a6, b5 and h5 also have their share of the blame. However, the bishop enjoys open diagonals, and the pawns at f6 and g5 are covering some dark squares. The correct result should be a draw and for the moment Black should adopt a waiting strategy.

46...gxh4?!

One of the most famous blunders in chess history, running into an unexpected reply. 46...♔e6! should have led to a draw, as the analysis of other similar examples suggests.

46...gxh4?! 47.♘g2!!

One of those brilliant moves that, once seen, is unforgettable. The disappearance of the white pawn from h4 favours White, because it opens a way for his king and Black's pawn on h5 has no influence in the game.

47.gxh4 was the move that Black expected: 47...♗g6 48.♔g3 (48.♘g2 ♗f7 49.♘f4 and it seems that no progress can be made, because the square needed by the knight for attacking the pawns, f4, is also the invasion route for the king, and when the king is on f4 it is sufficient for Black to place his bishop on g6) 48...♔e6 49.♘g2 ♔d6 50.♘f4 ♗f7 51.♘d3 ♗e6 52.♘c5 ♗c8=.

47...hxg3+

After 47...h3 48.♘f4, the h3-pawn falls and in the new structure the white king can breach the defences and reach h5.

48.♔xg3 ♔e6

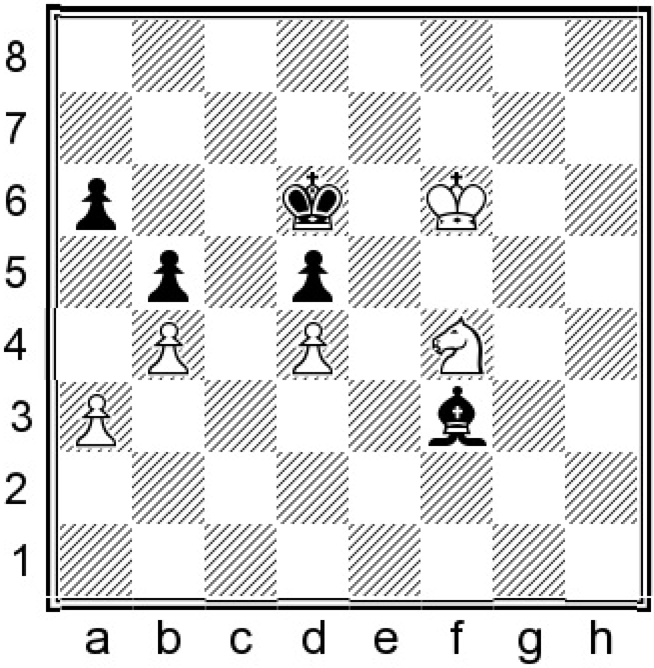
Or 48...♗g6 49.♘f4 ♗f7 50.♔h4, followed by ♘h5, and Black is unable to exchange the minor pieces.

49.♘f4+ ♔f5 50.♘xh5

The knight threatens to slip in via g7 and the black king has to go into reverse.

50...♔e6 51.♘f4+ ♔d6 52.♔g4 ♗c2 53.♔h5 ♗d1+ 54.♔g6 ♔e7!

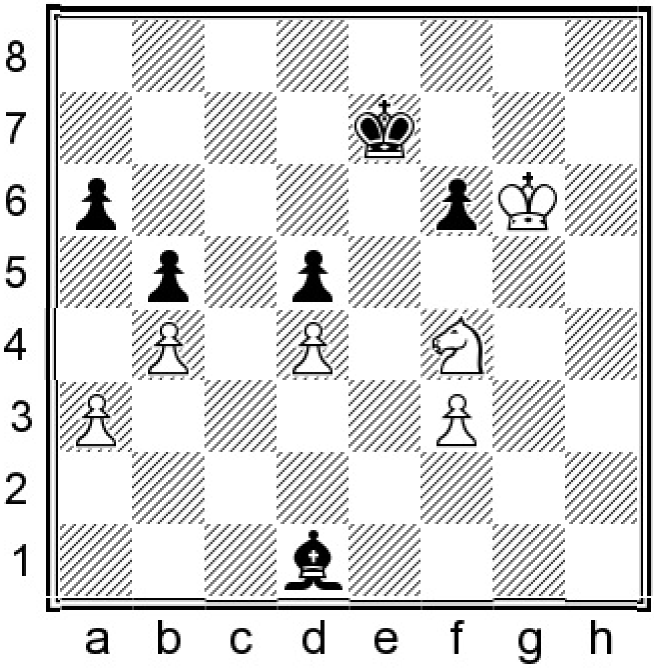
Black must defend the f6-pawn, because the position resulting from the exchange of f-pawns allows the inexorable progress of White's king and knight: 54...♗xf3 55.♔xf6+–.



analysis diagram

Black has fallen into the most absolute passivity. In this type of position, the side with the knight keeps gaining squares with a slow but inexorable manoeuvre, which consists of preparing and giving check with the knight, each time gaining a square: 55...♗g4 56.♘g6 ♗f3 57.♘e7 ♗g2 58.♘f5+! (here we see the first check and the subsequent advance of the white king) 58...♔c6 59.♔e5, followed by ♘e7 and the capture of the pawn.

Here we depart from the actual game:



55.♘h5!

Karpov played 55.♘xd5?! and we shall see the rest of the game in the next theme: the counterattack of the bad bishop. Here we shall see the plan of gradually exploiting the advantage of the good knight against the bad bishop.

55...♗xf3 56.♘xf6 ♔e6

And now we shall follow the classic progressive plan which we have already seen in the note to move 54:

57.♔g5 ♗e4 58.♘h5 ♗f3 59.♘f4+

The first check.

59...♔e7 60.♔f5 ♔d6 61.♔f6 ♗e4 62.♘h5 ♗f3 63.♘g7 ♗e4 64.♘f5+

The second check.

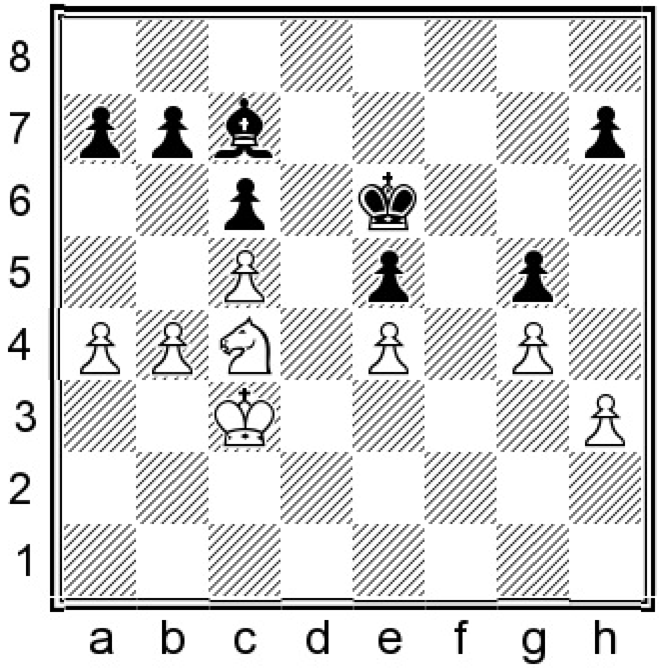
64...♔d7 65.♔e5 ♗f3 66.♘e3 ♔c6 67.♔e6 ♗e4 68.♘f5+–

Followed by the third check on e7.

The position where both sides have an isolated and blocked central pawn has occurred many times and has been studied in detail. We would refer you once again to Timman’s book. The conclusion seems to be that in such positions, the advantage of knight vs bad bishop is not enough to win if there are no other weaknesses in the position, but in practice it often wins.

We shall analyse just a few critical positions from games which have already been much analysed.

Jeroen Piket 2649
Zurab Azmaiparashvili 2673
Montecatini Terme 2000 (3)



Black to move

This seems to be the moment when Black committed the decisive mistake:

36...♔d7?

36...a6 seems to lead to a draw, e.g. (analysed in the cloud) 37.b5 axb5 38.axb5 cxb5 39.♘a3, similar to the next game.

36...♔d7? 37.b5! cxb5

Now everything has gone wrong for Black:

A) 37...♔e6 38.b6 axb6 39.cxb6 ♗d8 40.a5;

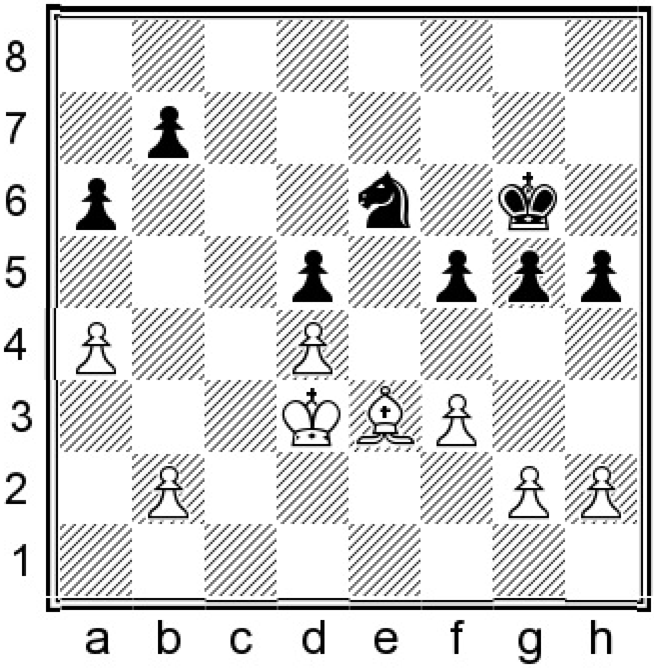
B) 37...♔c8 38.b6 axb6 39.cxb6 ♗b8 40.a5 ♔d7 41.♔b4 ♔c8 42.♔a4 ♔d8 43.a6 bxa6 44.♔a5+–.

38.axb5 ♔e6 39.♔b4 b6 40.♘b2 ♗d8 41.♔c4 ♗e7 42.c6

From now on, the pawn ending is always won and therefore the knight's invasion manoeuvre via the squares d3, b4 and a6 into the black position cannot be stopped.

42...♗d6 43.♘d3 ♗c7 44.♘b4 ♗d6 45.♘a6 ♗a3 46.♘c7+ ♔d6 47.♘e8+ ♔e6 48.c7 ♔d7 49.♔d5 ♗b2 50.♘f6+ ♔xc7 51.♘xh7 ♗c1 52.♔xe5+– a5 53.bxa6 b5 54.♔d5 ♔b6 55.e5 ♔xa6 56.e6 ♗a3 57.♘xg5 ♔b6 58.♘f7 1-0

Anthony Saidy
Bobby Fischer
New York 1964



White to move

This game was one of the first examples studied. Perhaps due to Fischer's tenacity, an ending which previously perhaps would not have been played out now seemed to be winning. But in fact White had two very clear chances to draw.

38.♔e2?!

38.g3! was the correct move. There are many positions in which the players get carried away by the overly schematic concept of a bad bishop in these endings, but this move does not weaken anything important. After 38...g4 39.fxg4 fxg4 40.♗d2, the white king can defend against the invasion via e4 forever, while the bishop will capture the knight as soon as it appears on a dangerous square (for example, g5).

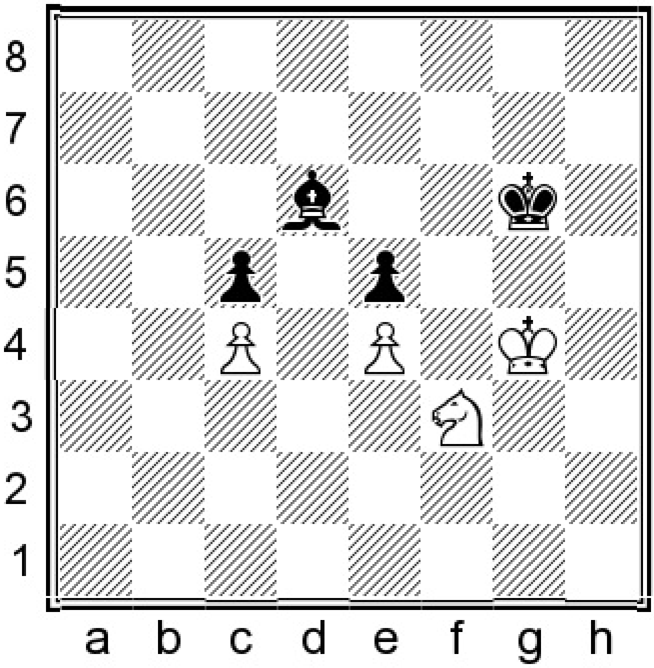
38.♔e2?! f4 39.♗f2 ♘g7 40.h3 ♘f5 41.♔d3 g4 42.hxg4 hxg4 43.fxg4 ♘h6 44.♗e1?

This was the second and decisive drawing opportunity: 44.♔e2! ♘xg4 45.♗g1 ('fanning' the knight) 45...♔f5 46.♔f3 ♘f6 (46...b5 47.axb5 axb5 48.g3=) 47.♗h2 ♘h5 48.a5 ♔g5 49.g4 fxg3 50.♗xg3=.

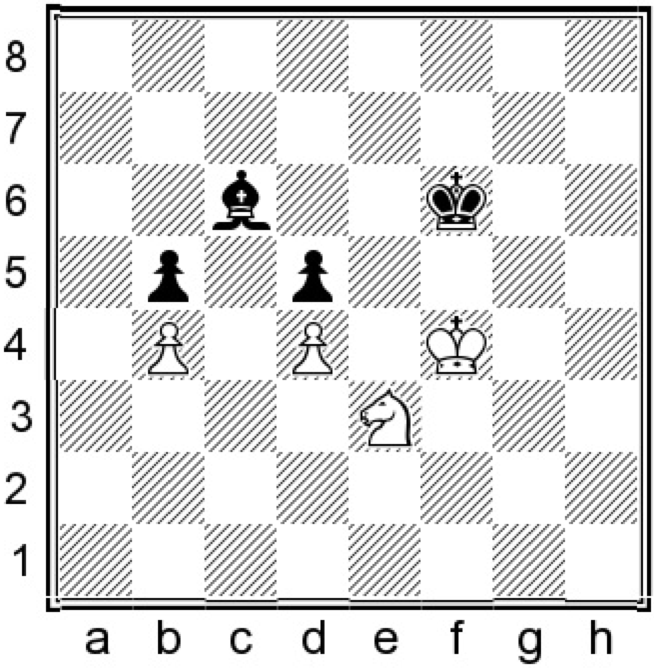
44...♘xg4 45.♗d2 ♔f5 46.♗e1 ♘f6 47.♗h4 ♘h5 48.♗e1 ♔g4 49.♔e2 ♘g3+ 50.♔d3 ♘f5 51.♗f2 ♘h4 52.a5 ♘xg2 53.♔c3 ♔f3 54.♗g1 ♔e2 55.♗h2 f3 56.♗g3 ♘e3 0-1

Pattern 54 Counterattack by the king with the bad bishop

This is not a classic theme. I came to the conclusion that it was important while analysing some of the positions that we shall look at in this section and I came to realise that I had ignored it in my games and that many other players also ignored it. The main idea is that in many bad-bishop positions, a passive strategy leads to disaster, while the loss of a pawn increases the bishop's activity and a better strategy is to try to counterattack with the king, in some cases right from the start and in others from a particular moment in the progress of the enemy plan.



Analysis 1928



Analysis 2020

These two diagrams show us very similar positions. The first one has been featured many times in classic books as an example of the definitive superiority of the knight. Nimzowitsch presents it with the wings reversed and Pachman with the black bishop on d4, which makes no difference. Our illustrious predecessors present them almost without analysis, as they take it for granted that it is enough to understand the manoeuvre of progressive penetration by the king, supported by knight manoeuvres. But in fact this ending is a draw, and this is because of the mechanism that we shall abbreviate as *bad bishop counterattack*.

1.♘h4+!

We all know the knight is superior here. White's only problem is how to penetrate with his pieces. This is achieved by repeating a manoeuvre with the knight over and over again, checking the enemy king and then advancing with one's own king one square. After repeating this manoeuvre many times, the king and the knight will capture the pawns, one after another.

1...♔f6 2.♔h5

Preparing the second check.

2...♗c7 3.♘f3!

The knight has to manoeuvre each time to provide the king with another square as it penetrates the enemy position.

3...♗a5

The bishop is transferred to a more active position. It is assumed that it makes no difference, but that is no reason not to do it.

4.♘h2 ♗c3 5.♘g4+

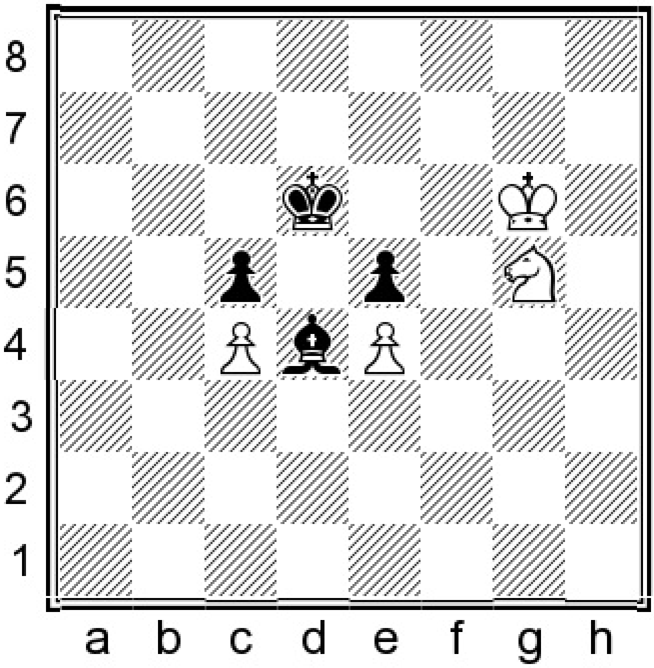
The second check.

5...♔e6 6.♔g6 ♗d4 7.♘f6 ♗c3 8.♘h7 ♗d4 9.♘g5+

The third check has arrived.

9...♔d6

We have reached a critical moment.



10.♔f6

This is the most natural variation. Now Black can save himself by launching a counterattack, which is the typical and only plan in these positions. 10.♔f5 changes nothing. From here the king cannot force the capture of the e5-pawn, nor ensure penetration of the enemy position. 10...♗c3?? was given in some old analysis but we have already stated that passive defence offers no hope: 11.♘f7+ ♔c6 12.♔e6 ♗d2 13.♘xe5+ ♔c7 14.♘g6 ♔d8 15.♔f7+–. In contrast, 10...♔e7! permits no progress and would force White to repeat the routine, e.g. 11.♘f3 ♔d6 12.♔f6 etc.

10...♔c6!

Passive defence is losing: 10...♗c3? 11.♘f7+ ♔c6 12.♔e6 ♔b6 13.♘xe5+–.

11.♘f7 ♔b6! 12.♘xe5 ♔a5 13.♔e6 ♔b4

The black king has completed its counterattack. All that remains is to carry out a few simple checks with regard to the pawn ending.

14.♔d5 ♗xe5 15.♔xe5 ♔xc4 16.♔d6 ♔d4 17.e5 c4 18.e6 c3 19.e7 c2 20.e8=♕ c1=♕

With a draw.

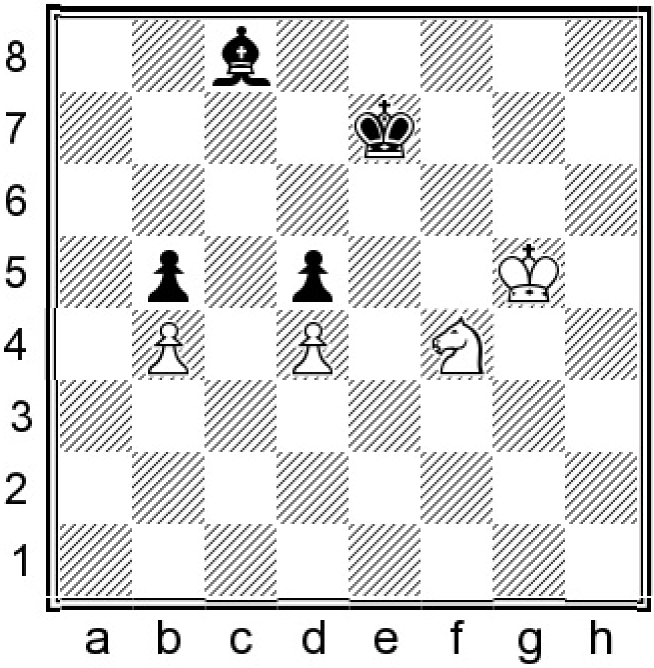
We shall now analyse the second position. The first time I understood that the previous ending was not winning and I saw the drawing mechanism, my conclusion was that with the position one file further to the left, White should win, because the counterattacking mechanism is no longer possible. But when I started to analyse it I received another surprise, in that the first moves almost do not matter:

1.♘g4+ ♔e6 2.♔g5 ♗b7 3.♘e5 ♗a6 4.♘d3 ♗c8!

Now this is necessary. Instead, 4...♔d6 5.♔f6 ♗c8 6.♘f4 leads to the analysis given at move 5.

5.♘f4+ ♔e7!

Preventing the approach of the king. Instead, 5...♔f7 also works, but not the natural 5...♔d6, which allows White to carry out his idea: 6.♔f6 ♗b7 7.♘h5 ♗c8 8.♘g7 ♗d7 9.♘f5++–.



6.♘xd5+

This is already a success... for Black! The bishop is gaining activity.

6...♔d6 7.♘c3 ♗h3

7...♗d7 is also possible, but holding onto the pawn is not the objective.

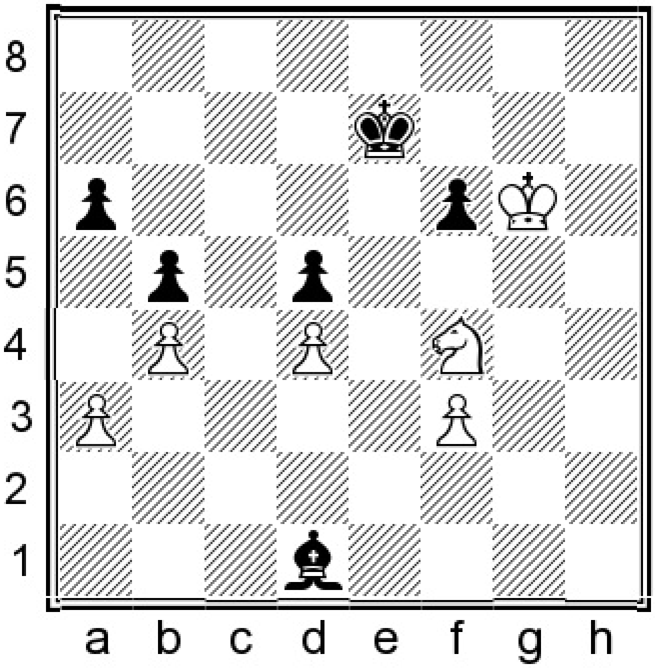
8.♔f6

Bringing the king to defend the d4-pawn does not win either: 8.♔f4 ♗g2 9.♘xb5+ ♔d5 10.♔e3 ♔c4=.

8...♗g2 9.♔f7 ♗f1 10.♔e8 ♗g2 11.♔d8 ♗f3 12.♔c8 ♗g2 13.♔b8 ♗f3 14.♔a7 ♗g2 15.♔b6 ♗f1! 16.♘xb5+ ♔d5 17.♔a5 ♗d3=

So, even with these pawns, a counterattack is possible and it is a draw. Black might lose with other pawns on the board, but the mechanism should be known and does not lose its value.

Anatoly Karpov 2705
Garry Kasparov 2812
Moscow WCh 1984 (m/9)



White to move

Back to this famous game, to verify that the handling of the theme of counterattack with the bad bishop was imprecise on the part of both players.

55.♘xd5+?!

This opens diagonals for the bishop and clears the way for the black king to come to d5, thus allowing the future counterattack. We have already seen 55.♘h5! in the previous section and this should win.

55.♘xd5+?! ♔e6 56.♘c7+ ♔d7?!

Kasparov appears to see the idea of counterattack but does not choose the most accurate option and makes his path to a draw more difficult. 56...♔d6! 57.♘e8+! (after 57.♘xa6?! the counterattack by the black king is obvious: 57...♗xf3 58.♔xf6 ♗g4 59.♘c5 ♔d5 60.♔e7 ♔xd4=) 57...♔e7 58.♘xf6 ♗xf3 59.♔f5 ♔d6. We know that this position is lost with a black pawn on d5, but now the black king's counterattack route via d5 cannot be closed and the position is a draw: 60.♔f4 ♗g2 61.♔e3 ♗h3.

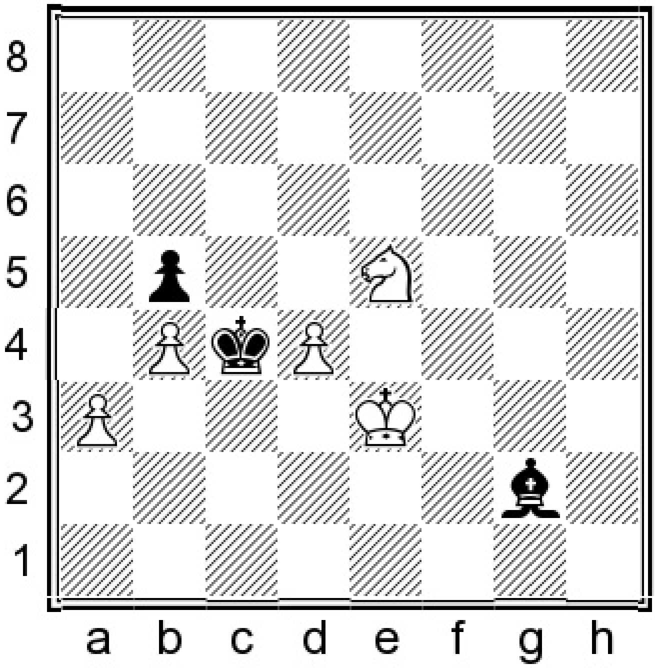
57.♘xa6 ♗xf3 58.♔xf6 ♔d6 59.♔f5 ♔d5

The black king is becoming active and the bishop now has many free diagonals. Even two pawns down, the position is a draw.

60.♔f4 ♗h1 61.♔e3 ♔c4 62.♘c5

Preventing 62...♔b3.

62...♗c6 63.♘d3 ♗g2 64.♘e5+



64...♔c3

64...♔d5 is less logical, but it is interesting to show that this also seems to lead to a draw, for example: 65.♔d3 ♗e4+ 66.♔c3 ♗f5 67.♘d3 ♗g4 68.♘f4+ ♔e4 69.♘g6 ♔d5 70.♘e7+ ♔d6! 71.♘g6 ♔d5 72.♘e5 ♗f5 73.♘d3 ♗g4 74.♘c5 ♗c8 75.a4!? (the best try) 75...bxa4 76.♘xa4 ♗a6! 77.♘c5 ♗b5 and there is no progress.

65.♘g6 ♔c4 66.♘e7 ♗b7?

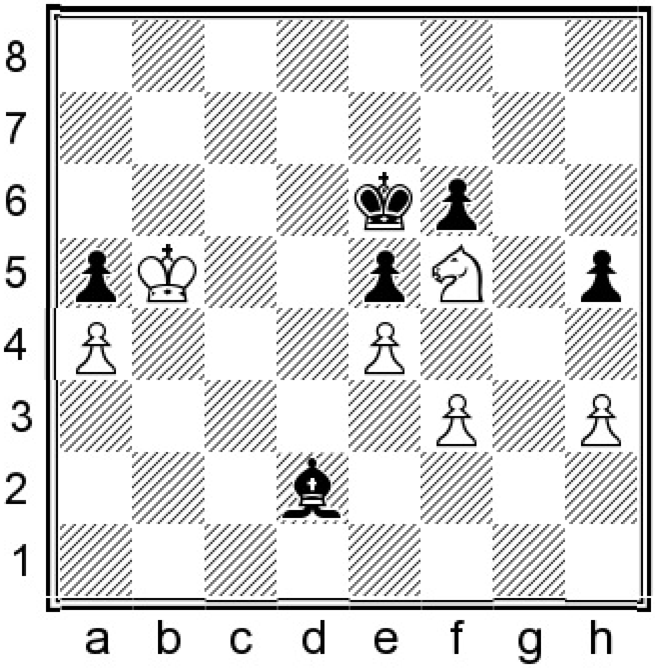
Here comes the mistake, although Kasparov's tenacious defence in unknown terrain has been hugely meritorious. He needed to keep the bishop at the far end of the board, because after 66...♗h1! 67.♘f5 Black can then play 67...♔d5= and White cannot play 68.♔d3.

67.♘f5 ♗g2?!

67...♔d5!? was much more resilient, but the transfer of the white knight to c3 should still win: 68.♔d3 ♔e6 69.♘g7+ ♔d6 70.♘e8+ ♔d7 71.♘f6+ ♔e6 72.♘e4 ♗a8 73.♘c3 ♗c6 74.d5+ ♗xd5 75.♘xb5+–.

68.♘d6+ ♔b3 69.♘xb5 ♔a4 70.♘d6 1-0

Levon Aronian 2812
Hikaru Nakamura 2789
Wijk aan Zee 2014 (4)

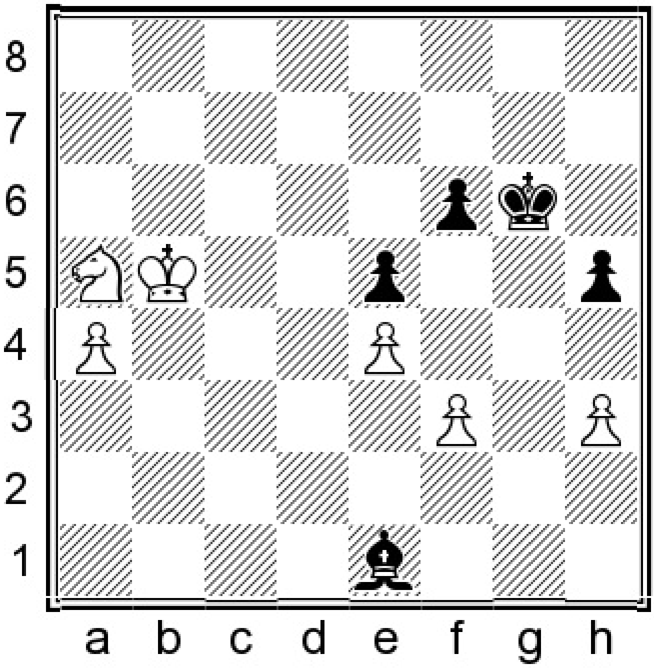


Black to move

Here we have a genuine position of good knight vs bad bishop. Until recently we viewed such positions with infinite resignation, as Nakamura must have done here, but now we know that the faint hope of a counterattack may gleam from beyond the horizon and we must ride towards it:

40...♔d7?

Black fails to see the saving plan, which consists of counterattacking with the king: 40...♔f7!. The analysis has few variations. It is mainly a question of counting accurately: 41.♘d6+ (41.h4 prevents the counterattack by the black king but creates a weakness on h4 which ties down the knight: 41...♗e1! 42.♔c6. Now the only feasible plan would be an outflanking manoeuvre by the white king to capture the h5-pawn: 42...♔e6 43.♔c7 ♗f2 44.♔d8 and now 44...♔f7, barring the way to the white king, is the simplest option) 41...♔g6 42.♘c4 ♗e1 43.♘xa5.



analysis diagram

White has now captured the pawn and the black king needs three more moves, but now the bishop's advantage over the knight in stopping passed pawns becomes apparent: 43...♔g5 44.♘c6 ♔h4 45.♘b4 (White needs to block the bishop's diagonal, due to the knight's clumsiness in stopping passed pawns: 45.a5? ♗xa5 46.♘xa5 ♔xh3 and Black even wins) 45...♔xh3 46.a5 h4 47.a6 ♗f2 48.♘d5 (once again threatening to block the bishop) 48...♗a7 (48...♔g3 also draws) 49.♔c6 ♔g3 50.♔b7 h3 51.♔xa7 h2 52.♔b7 h1=♕ (Black has even queened first) 53.a7 ♕b1+ 54.♔c8 (54.♘b6?? ♔xf3–+) 54...♕a2 55.♔b7=.

40...♗e1= is a transposition, because White is unable to capture the h5-pawn, i.e. 41.♘g7+ ♔f7 42.♘xh5?? ♔g6 and the knight is trapped.

40...♔d7? 41.♘g7!

Now White does have time to provoke the advance of the black pawn to h4.

41...h4 42.♘f5 ♗e1 43.♘e3

Now the white knight heads off to capture the a5-pawn.

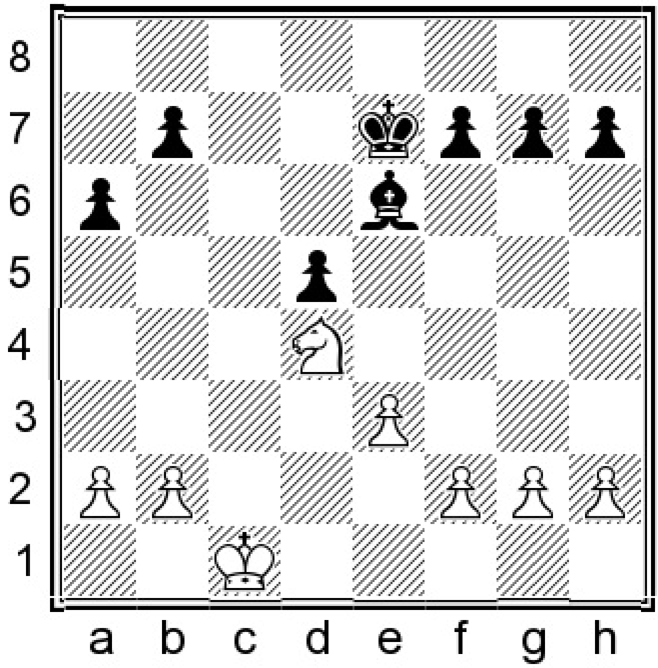
43...♔e6 44.♘c4

Black resigned.

Pattern 55 The isolated pawn

The isolated centre pawn is a common theme in all endings, most of all because it stems from typical openings and middlegames. In the knight's struggle with the bishop, an isolated centre pawn is only really dangerous when accompanied by a passive bishop. We can look at the games from the 1974 Karpov-Kortchnoi match to verify that with a good bishop there are few problems. But even when it is the wrong bishop, if it is not accompanied by other disadvantages the experience of very high-level games indicates that the position can be held.

Salo Flohr
José Raul Capablanca
Moscow 1935 (13)



White to move

A mature Capablanca, perhaps not as strong now in complex positions, but with sublime endgame technique, gives us an object lesson in how to defend this position and leaves us with hardly any need to see any further examples.

24.♔d2 ♔d6 25.♔c3 b6!

Just as in endings with bishops of the same colour, Black should place most of his pawns on dark squares, especially b6 and f6, to cover the white king's invasion squares.

26.f4

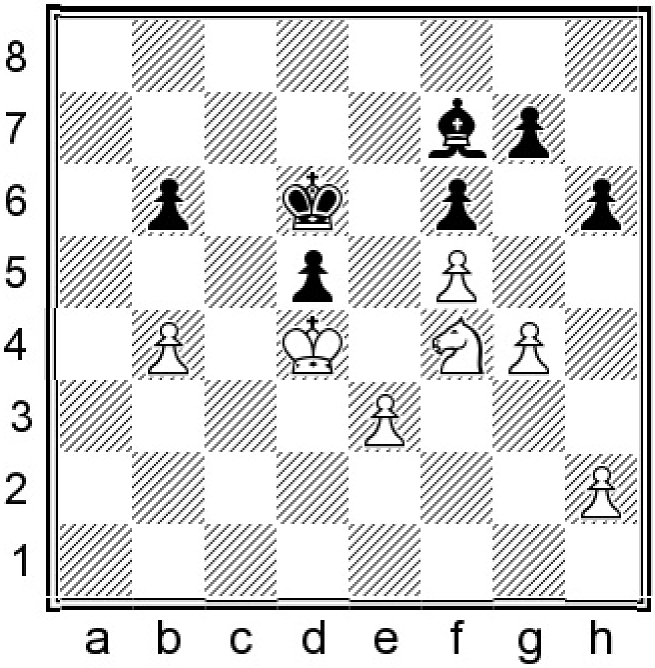
26.b4!? would have left open the possibility of advancing with a4-a5, which would weaken the c5-square, something that Black could have prevented by beginning with 25...a5; however it seems that Black could always respond to a2-a4 with ...a6-a5 and create a weakness for White on a4.

26...♗d7 27.♘f3 f6 28.♔d4 a5! 29.♘d2 ♗c8 30.♘b1 ♗e6

All the defensive pawns are in place. Now Black waits.

31.♘c3 ♔c6 32.a3 h6 33.g3 h5!

Again the best move. It has sometimes been criticised because it places a pawn on a light square, but it does not weaken any square (g5 is covered) and in the long run it would be necessary anyway, to prevent one of White's winning plans in this position, which is to advance the f-pawn to f5, supported by g4, then bring the knight to f4 and, with the black king on c6, play ♘e6 and win the pawn ending. For example: 33...♗f7 (perhaps 33...♔d6 holds the position) 33...♗f7 34.f5! ♔d6 35.g4 ♔c6 36.b3 ♔d6 37.b4 axb4 38.axb4 ♔c6 39.♘e2 ♔d6 40.♘f4.



analysis diagram

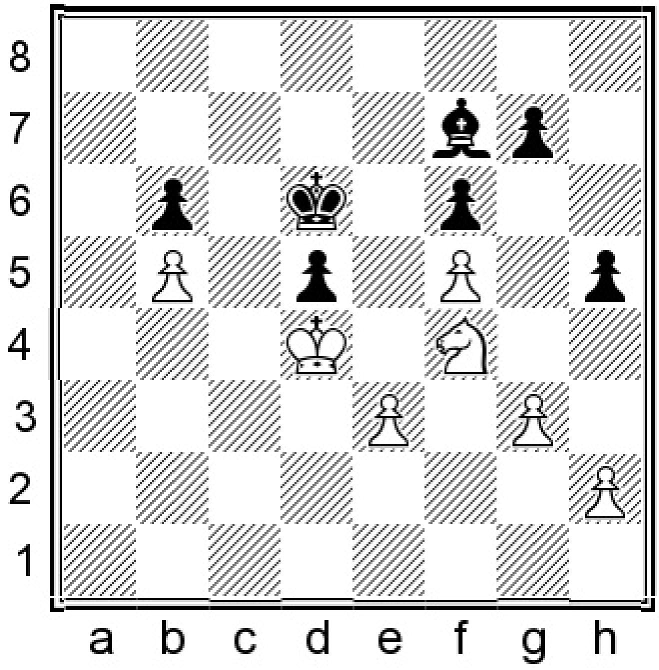
Zugzwang.

34.b4 axb4 35.axb4 ♔d6 36.b5

Flohr plays very directly. Perhaps he had great faith in his plan, or was excited by being so close to defeating Capablanca. Now Black is unable to move either the king or the bishop, so he is nearly in zugzwang.

36...g6!

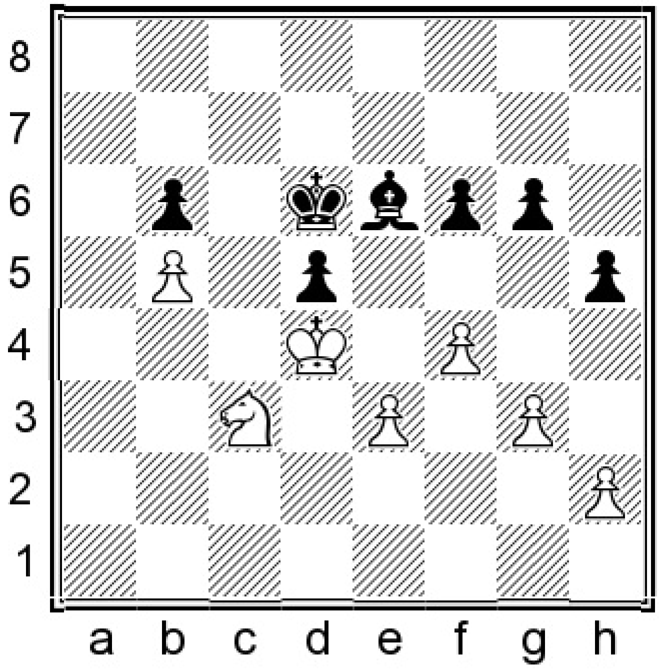
Another pawn on a light square, but this time it is absolutely necessary, for example: 36...♗f7 37.f5! ♗g8 38.♘e2 ♗f7 (38...♗h7? 39.♘f4 ♗xf5 40.♘xh5 wins a pawn.) 39.♘f4.



analysis diagram

With zugzwang: 39...♗e8 40.♘xd5 ♗xb5 41.♘xb6, with an extra pawn and winning chances.

37.♘a4 ♔c7 38.♘c3 ♔d6



39.f5!

Sooner or later, this had to be played.

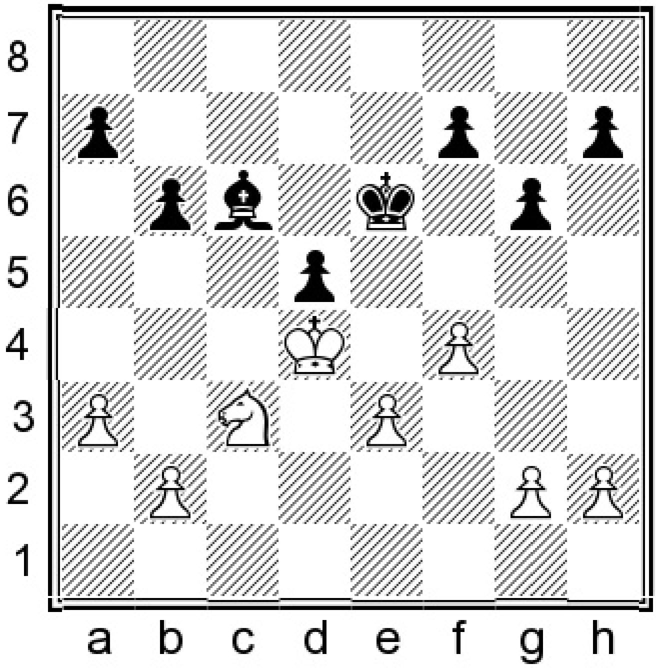
39...gxf5 40.♘e2 ♗d7 41.♘f4 ♗e8!

41...♗xb5 42.♘xh5 should draw, but leaves White with a scary-looking passed pawn on the h-file.

42.♘xd5 ♗xb5 43.♘xb6 ♗c6 44.♘c4+ ♔e6 45.♘b2 ♗b5 46.♘d1 ♗e2 47.♘f2 ♗f1 48.♘d3 ♗xd3 49.♔xd3 ♔e5 50.♔e2 ♔e4 51.h3 ♔d5 52.♔f3 ♔e5 ½-½

We shall again undertake the exercise of studying a very similar position which had a different result and then trying to understand the reason.

Sergey Belavenets
Vsevolod Rauzer
Moscow 1937



Black to move

Is there any important difference between this position and the previous one? Yes, and more than one. The bishop is defending from the other side and this is less effective, because it fails to oppose White’s pawn advances with h2-h3, g2-g4 and f4-f5. Furthermore the black pawn is already on g6 and that makes it easier for White to control the weak e5-square. But even all this should not be enough for Black to lose.

It is quite curious that in the case of an isolated pawn in a same-coloured bishops ending, the correct position for the defender’s bishop should be on the opposite wing to when facing a knight (see **Pattern 35**).

30...♔d6

30...a5?! would have been risky here, because it could lead to a weakness on the b6-square, for example 31.b4 axb4 32.axb4 f6 33.g4 ♔d6 34.g5 f5 35.h3 (zugzwang) 35...♗b7 36.b5 ♗c8 (36...♗a8 37.♘a4 ♔c7 38.♔e5+–) 37.♘xd5 ♗d7 38.♘xb6 ♗xb5 39.♘d5+–, followed by ♘f6.

30...♔d6 31.b4 ♔e6?!

At the moment, waiting tactics do not lose. Due to the position of the bishop stuck on the queenside, it will not be possible to prevent White from creating a new weakness on the kingside. So Black's best course should be to alter the position of the kingside pawns now, to cover the e5-square in a lasting way, or else weaken the white pawn chain: 31...f6! 32.g4 h6 33.h4 g5! 34.hxg5 hxg5 35.fxg5 fxg5 (the e5-square has been weakened, but this is not enough) 36.e4 dxe4 37.♘xe4+ ♗xe4? (this loses; 37...♔e7! 38.♔e5 ♗d7 39.♘f2 ♗c8=) 38.♔xe4 ♔e6 39.b5 zugzwang.

32.b5 ♗b7 33.♘a2 ♔d6 34.♘b4 ♔e6?

This mistake is decisive. After 34...f6! 35.g4 h6 36.h4 g5! 37.hxg5 (37.h5 ♗c8 38.f5 ♗b7) 37...hxg5 38.a4 ♗c8 39.f5 ♗b7 it appears that White has no way to make progress.

35.g4!

Threatening to fix the pawns at g6 and h7 by playing 36.g5.

35...f5

After 35...h6 36.♘c6! ♗xc6 37.bxc6 ♔d6 38.c7 ♔xc7 39.♔xd5 ♔d7 40.e4 White wins thanks to the dominant position of his king.

Or 35...f6 36.♘c6! and here too 36...♗xc6 37.bxc6 ♔d6 38.c7 ♔xc7 39.♔xd5 ♔d7 40.e4 wins for White.

36.g5

The h7-pawn is fixed and is a decisive weakness.

36...♔d6 37.h3!

For the plan that White is following this tempo move is correct, rather than 37.h4?! ♔e6 38.♘a2 ♔d6 39.♘c3 ♔e6 40.♘e2 ♗c8 41.♘g3 ♗d7 42.a4 ♗e8±.

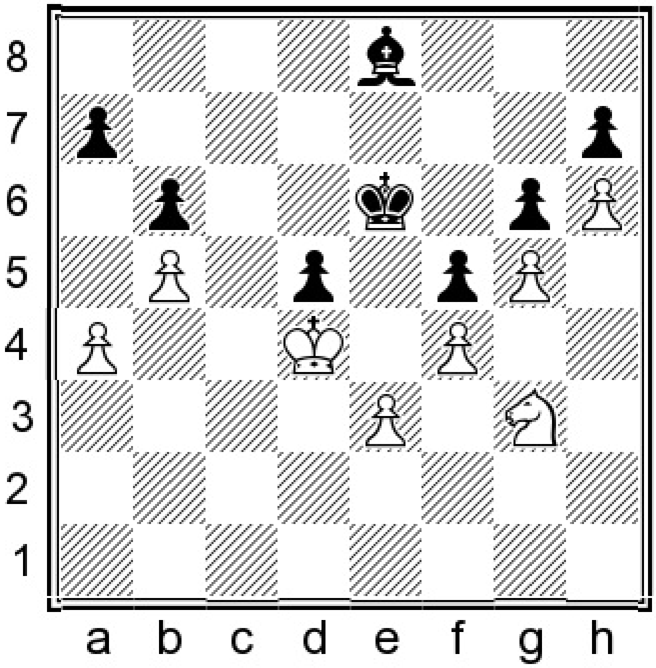
37...♔e6 38.♘a2 ♔d6 39.♘c3 ♔e6 40.h4

Now White advances his pawn to h6, after which Black will be constantly faced with the threat of a sacrifice on f5 or g6.

40...♔d6 41.♘e2 ♗c8

Shereshevsky identified this as the decisive mistake, but his suggestion of 41...a6 is no better: 42.♘c3 axb5 (42...a5 43.♘a4 ♔c7 44.♔e5 is easier) 43.♘xb5+ ♔e6 44.♘c7+ ♔d6 45.♘e8+ ♔e6 46.h5! gxh5 47.♘g7+, followed by ♘h5 and the whole black position is in ruins.

42.♘g3 ♗d7 43.a4 ♔e6 44.h5 ♗e8 45.h6



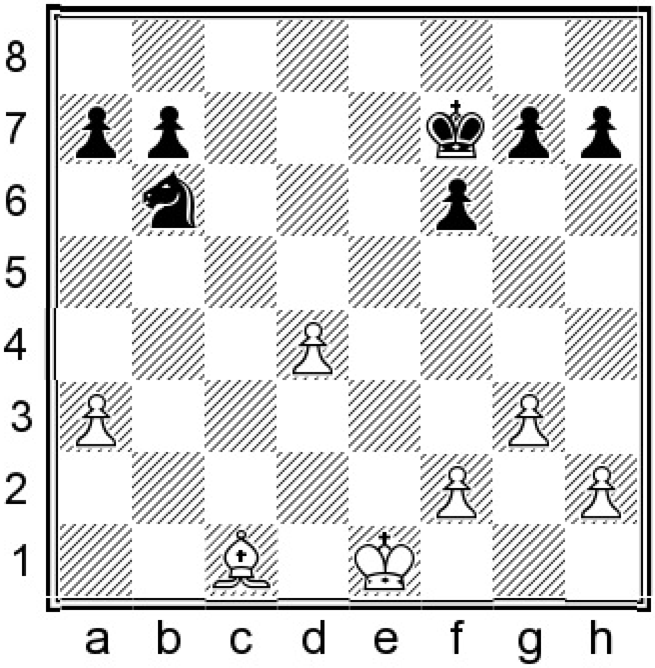
Finally we have reached a position featuring a very bad bishop, with all the typical defects: eternal passivity and absolute inability to defend the squares of the other colour. For White it is now just a question of manoeuvring, demonstrating that the knight is very flexible in this type of position and will always find a way. The rest requires little comment.

45...♔d6 46.♘e2

Black resigned here. There could have followed: 46...♗d7 (46...♗f7 47.♘c3 ♗e6 48.♘a2 ♗g8 49.♘b4 ♗f7 50.♘c6 ♗e8 51.♘xa7 ♗d7 52.♔d3! (zugzwang) 52...♔c7 53.♔c3 ♔b7 54.♔d4! ♔xa7 55.♔xd5 and White wins) 47.♘c3 ♗e6 48.♘a2 ♗f7 49.♘b4 ♗e6 (49...♗g8 50.♘c6) 50.♘c6 a6 51.bxa6! (the quickest) 51...♔xc6 52.a7 ♔b7 53.♔e5 ♗d7 54.♔f6 ♗xa4 55.♔g7 b5 56.♔xh7 b4 57.♔xg6 b3 58.h7 ♗e8+ 59.♔f6 b2 60.h8=♕ b1=♕ 61.a8=♕+ 1-0.

Now we are going to see another isolated pawn structure which is more favourable to the side with the knight.

Miguel Quinteros
David Bronstein
Vinkovci 1970 (12; variation)



Black to move

Here the black pieces can both pivot round the square d5, but in addition Black has a mobile majority which will create a distant passed pawn. The advantage is winning and the plan is simple to execute.

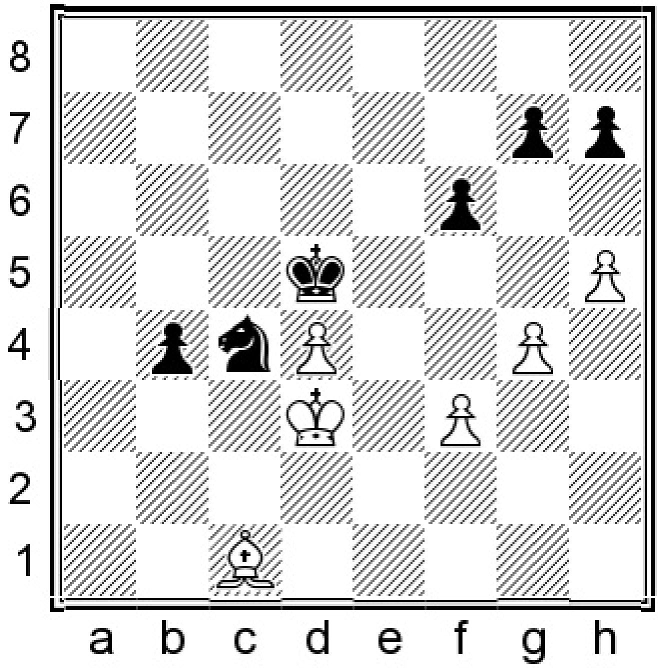
31...♔e6 32.♔d2 ♔d5 33.♔d3 ♘c4 34.f3

34.a4?! would have allowed the classic persecution by the knight: 34...♘b6! 35.a5 ♘c4 and the pawn is lost.

34...b5

Now Black simply creates the distant passed pawn and diverts the white pieces.

35.g4 a5 36.h4 b4 37.axb4 axb4 38.h5



38...b3!

And now Black simply forces a winning pawn ending.

39.♗f4

39.♔c3 b2 40.♗xb2 ♘xb2 41.♔xb2 ♔xd4–+.

39...h6 40.♗b8 b2 41.♔c2 ♔xd4 42.♗a7+ ♔d5 43.♗f2 ♘e5 44.♔xb2 ♘xf3

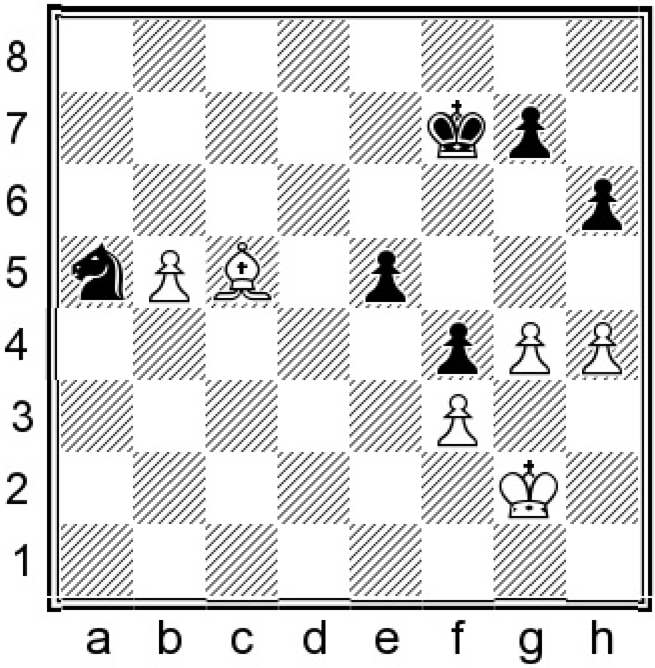
And White resigned.

Pattern 56 The distant passed pawn

We approach this theme for the third time. In bishop vs knight endings, a distant passed pawn is a big advantage, almost always decisive, if it belongs to the side with the bishop, and a moderate advantage, although sometimes sufficient to win, for the knight. The strategy is the classic one: the pawn advances and has to be dealt with; if the king does so, it leaves the other wing undefended; if the minor piece does so, it cannot eliminate it and its nuisance value persists.

Choosing which piece should deal with the passed pawn can be a crucial decision, as we can see now in this first example.

Maya Chiburdanidze
Margareta Muresan
Luzern ol w 1982



Black to move

The white passed pawn is very distant and the black kingside pawns are easily attackable. In the game Black chose to restrain the pawn with the knight and defend the kingside with the king, which in the end was not sufficient. We shall also analyse the other plan:

45...g6?!

45...♘b7!? is more active and forces White to be very precise, but it fails to draw: 46.♗a3! (the difference between this move and the more natural 46.♗b4 is quite hidden and instructive: 46...♔e6 47.♔f2 ♘d6 48.b6 ♔d7!. At the moment the pawn ending is not losing: 49.♔e2 ♘f7! (necessary, because now the pawn ending would indeed be losing: 49...♔c6? 50.♗xd6 ♔xd6 51.♔d3+–) 50.♔d3 ♔c6 51.♔e4 ♔xb6 52.♔f5 ♔b5 53.♗f8 g6+! 54.♔e4 (54.♔xg6? e4! and Black wins) 54...♔c6=) 46...♔e6 47.♔f1 ♘d6 48.b6 ♔d7 49.♔e2 ♘f7 50.♔d3 ♔c6 51.♔e4 ♔xb6 52.♔d5! (the bodycheck. The white king advances without allowing the black king to approach) 52...♔b5 (52...♔c7 53.♔e6) 53.h5 (53.♔e6? e4 would be hasty) 53...♘g5 54.♔xe5 ♘xf3+ 55.♔xf4 ♘g5 56.♔f5 ♔c6 57.♗b2 and the black pawns fall.

45...g6?! 46.h5! gxh5

46...g5 prevents entry by the white king but dooms the h6-pawn, or else ties the black king to its defence for ever. 47.♔f2, bringing the king to the queenside, wins for White.

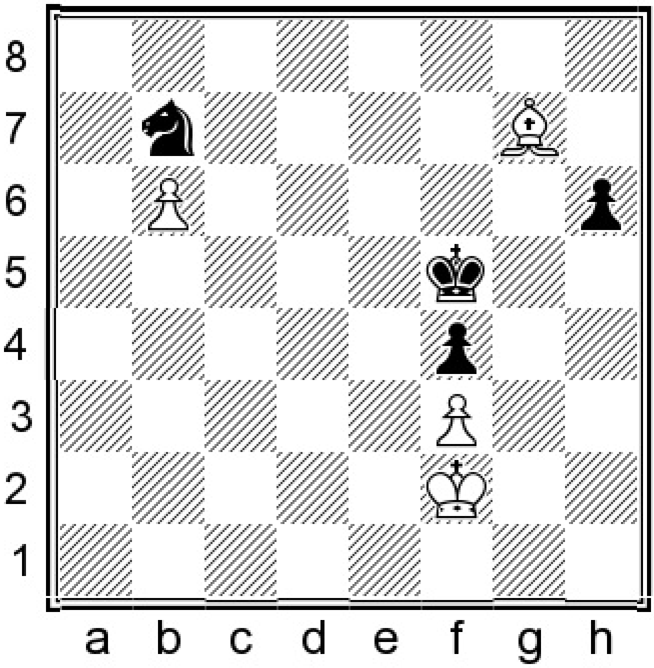
47.gxh5 ♔f6!

Now at least the black king can counterattack against the h5-pawn. But at this moment the distant passed pawn reveals itself as an unstoppable force:

48.b6 ♘b7 49.♗f8 ♔g5 50.♗g7 ♔xh5 51.♗xe5 ♔g5 52.♔f2

The white king is unable to get through on the kingside, but now threatens to slip through on the queenside.

52...♔f5 53.♗g7



53...h5

53...♔g5! 54.♗f8 ♘a5 55.♔e2 ♔h4 56.♔d3 ♔g3 57.♔e4 ♘b7 58.♗b4! and White wins.

Heading for the queenside with 54.♔e2 doesn't work immediately here due to 54...♔h4! 55.♗xh6 ♔g3=.

54.♔g2!

With the black pawn on h5, the white king changes direction, because now it can slip through on the kingside.

54...♘c5 55.♗f8 ♘b7 56.♔h3 ♔g5 57.♗e7+ ♔f5

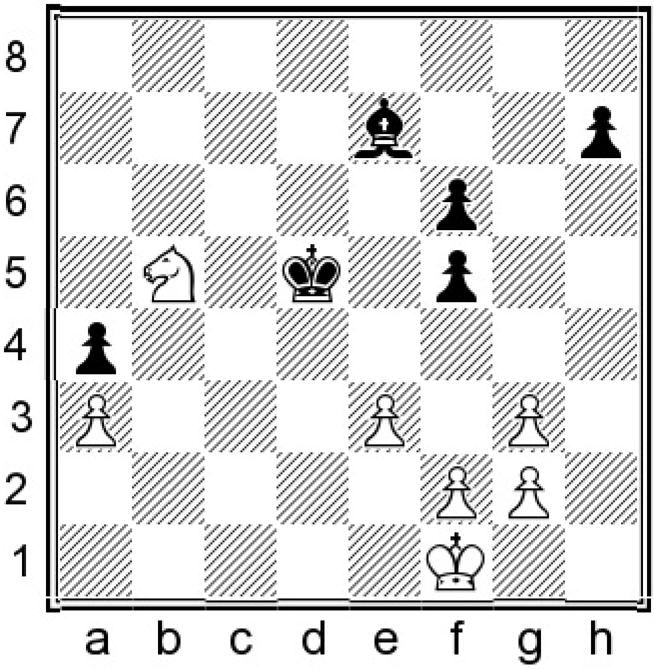
57...♔g6 58.♔h4 ♘a5 59.♗d6+–.

58.♔h4

Black resigned, because after winning the h5-pawn the white king will be able to continue its penetration of the black position.

The more distant the passed pawn, the more problems the knight has in stopping it. A passed rook's pawn is usually decisive.

Ariel Sorin
Jesus De la Villa
Palma de Mallorca 1992 (9)



Black to move

31...♔c4

The king attacks the knight and Black wins the a3-pawn by force. Subsequently Black's a-pawn will cost White his knight.

White will try to exchange pawns on the kingside, but this fails to create any serious problems for Black.

32.♘d4 ♗xa3 33.♔e2 ♗b2 34.♘c2 h5

Preparing for the future ending of bishop against pawns.

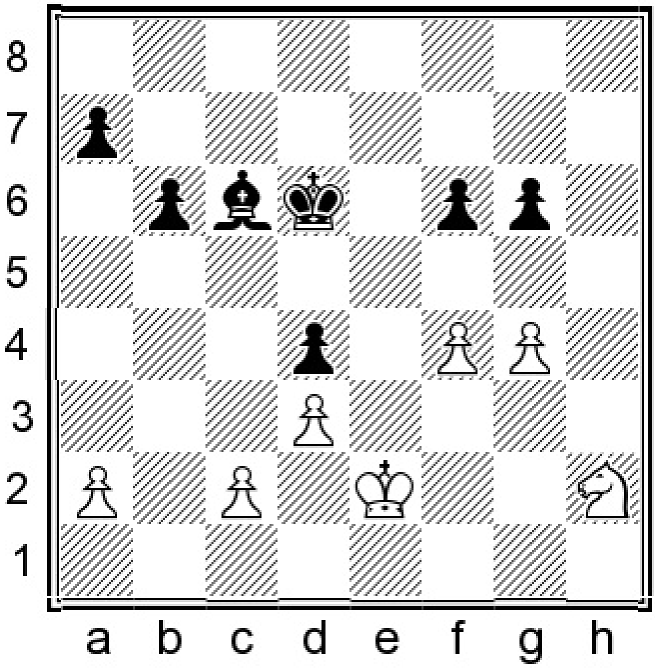
35.♔d2

After 35.♔f3 ♔b3! the knight could not even sacrifice itself for the pawn.

35...a3 36.♘xa3+ ♗xa3 37.♔e2 ♗d6 38.♔d2 ♗e5 39.♔e2 ♔c3 0-1

In the following classic game, we see a further example of the knight's difficulties against a passed rook's pawn.

Richard Réti
Akiba Rubinstein
Gothenburg 1920 (7)



Black to move

41...♗d5! 42.a3

It is important that the pawn ending after 42.♘f3?! ♗xf3+ 43.♔xf3 ♔d5! is losing.

42...b5!

The pair of pawns (a- and b-) have now been converted into a majority. Black threatens to create a passed pawn on the a-file with the moves ...a7-a5, ...a5-a4 and ...b5-b4. White must decide which of his two pieces to use to take care of this.

43.♘f1

The knight is coming. If White uses the king instead, after 43.♔d2 the incursion on the other wing is immediate and devastating: 43...g5! (in order to gain the e5-square for the king) 44.fxg5 fxg5 45.c3 dxc3+ 46.♔xc3 a5 47.♘f1 ♔e5 48.♘e3 ♗e6–+, followed by ...♔f4. A few small comparisons allow us to observe that with kingside pawns further back, White would be able to defend.

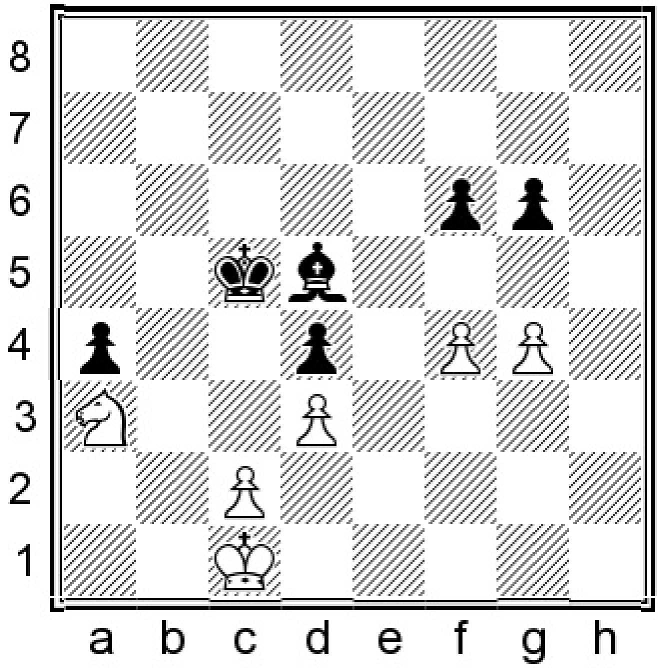
43...a5 44.♘d2 a4! 45.♘b1!

We now diverge from the game with this move, which although inadequate would be the logical defence.

The game continued 45.♘e4+?! (losing the plot) 45...♗xe4 46.dxe4 b4! 47.♔d2 bxa3 48.♔c1 g5 0-1.

45...♔c5! 46.♔d1 b4 47.♔c1 bxa3 48.♘xa3

The distant passed pawn has been created.



48...♔b4 49.♔b2

Both white pieces are now occupied.

49...g5!

Fixing the weakness on the other wing.

50.fxg5 fxg5 51.♘b1 ♗c6!

Zugzwang.

52.♘d2

52.♘a3 ♗d7!.

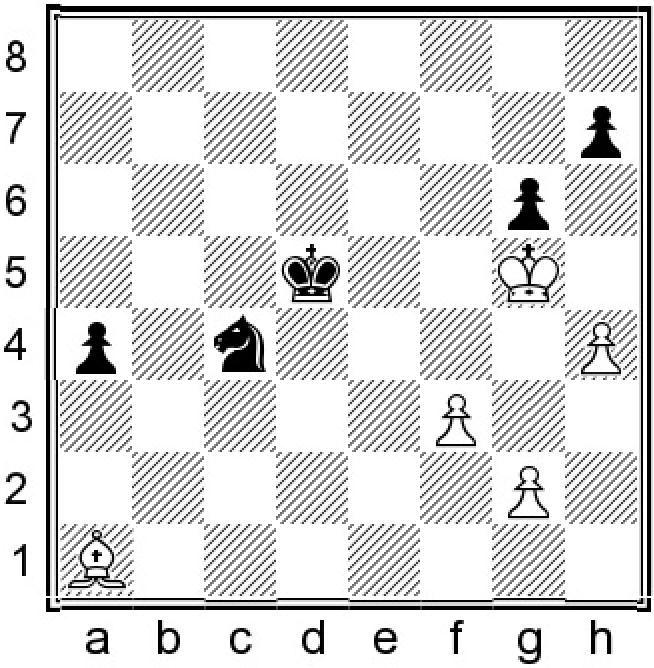
52...a3+ 53.♔c1 ♗d5

Another zugzwang.

54.♔b1 ♔c3–+

In contrast, the bishop is much better at combating a rook's pawn, and then the advantage of the distant passed pawn, although important, is not always decisive.

Mikhail Perelstein
Varlam Vepkhishvili
Pushkin Hills 1977



White to move

53.♔h6 ♘e3 54.g4 a3?!

Black opts for the ambitious line and is rewarded with success. Objectively the correct way was to adopt the defensive plan with 54...♘g2! 55.h5 gxh5 56.gxh5 ♘f4 57.♔g5 ♘e2 58.♔h6 ♘f4=.

55.♔xh7 ♘c2

The bishop has been deprived of the b2-square by Black's previous move and on the c3-square it can be attacked, while if it goes beyond the d4-square, it will suffer interference by the knight on that square. Thus White is unable to keep preventing the promotion of the a-pawn and it all becomes a race.

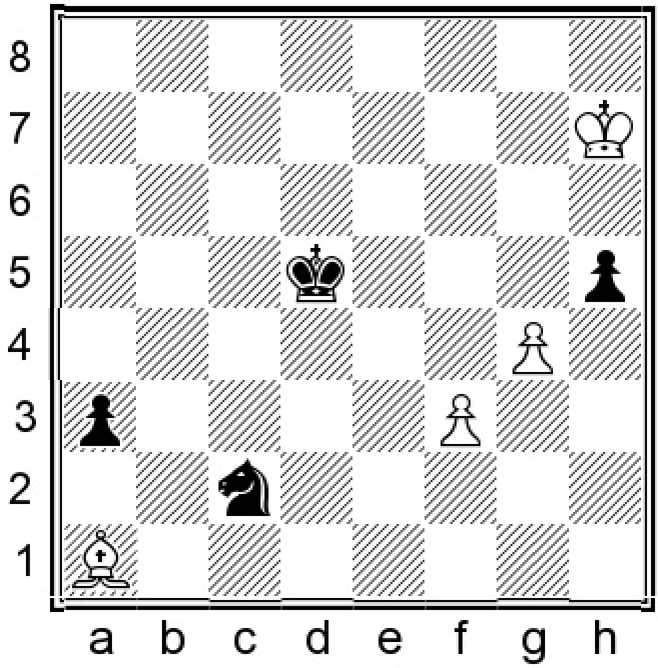
56.h5?!

Other moves are inferior, apart from one, which is a slight improvement on the game continuation:

A) 56.♗c3? ♔c4 57.♗f6 ♘d4 and the a-pawn queens;

B) But after 56.g5! ♘xa1 57.h5 gxh5! (if 57...a2? 58.hxg6 ♘c2 59.g7 a1=♕ 60.g8=♕+ the position is drawn, but Black will have to suffer in an unpleasant ending of queen and pawn vs queen) 58.g6 a2 59.g7 ♘b3! 60.g8=♕+ ♔d4 61.♕xb3 a1=♕=, there is an immediate draw.

56...gxh5



57.g5?

57.gxh5! ♘xa1 58.h6 is a draw, although White would have to play out an unpleasant ending of ♕+♘ vs ♕.

57...♘e3!

Now the knight stops the g-pawn and two distant passed pawns are too much for the white pieces.

58.♔g6 h4 59.♔f6 ♔d6! 60.g6 ♘d5+ 61.♔f7 ♘e7 62.g7 ♘f5?!

62...h3!–+.

63.g8=♘! h3 64.♘f6 h2 65.♘e4+ ♔d5 66.♘f2 ♘d4

Repeating the classic interference manoeuvre.

67.f4 ♘c2 68.f5

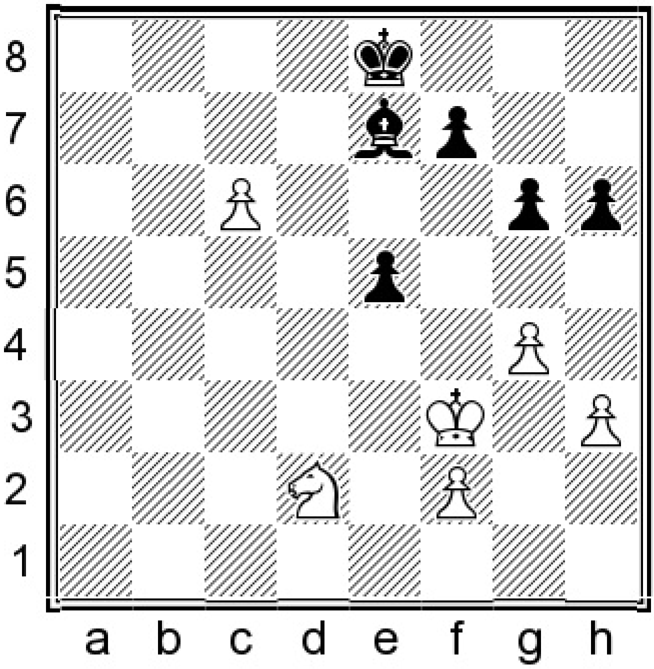
Or 68.♗g7 ♘d4, another interference, and the pawn queens.

68...♘xa1 69.♔e7 ♘b3 70.f6 ♘d4 0-1

In another classic game, Levenfish managed to win with his distant passed pawn, but only thanks to weak defence by his opponent.

Analysis leads us to believe that with a knight the advantage of a distant passed pawn is much smaller.

Grigory Levenfish
Viacheslav Ragozin
Leningrad/Moscow 1939 (17)



Black to move

40...♔d8

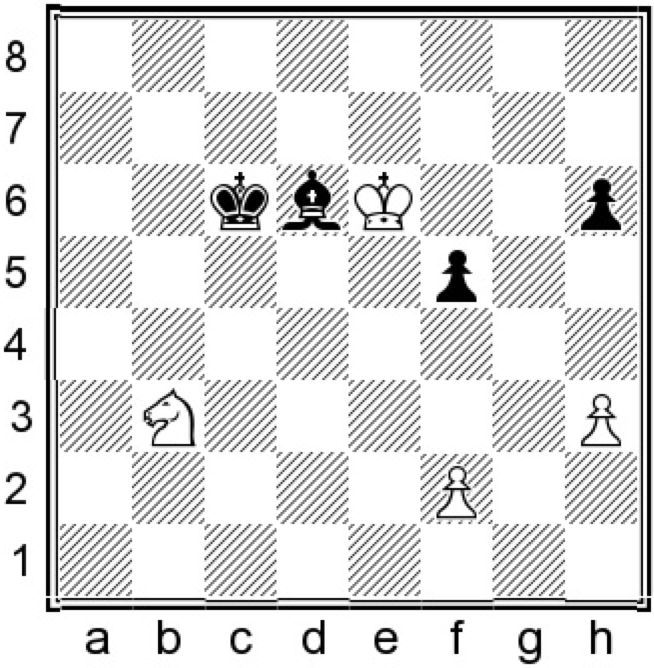
The black king moves towards the pawn, but it was essential to block the white king's path with 40...f5! 41.gxf5 gxf5, followed by attacking the pawn with the king. It would have been natural for Black to fear 42.♘c4 e4+ 43.♔f4 ♗h4 44.♔xf5 ♗xf2 45.♔xe4, since the white king can defend the c6-pawn, but White will be unable to make any further progress.

40...♗c5!, with an annoying attack on the f2-pawn, should also draw.

40...♔d8 41.♔e4! ♔c7 42.♔d5!

Now, in addition to his distant passed pawn White has a dominant king.

42...f5 43.gxf5 gxf5 44.♔xe5 ♔xc6 45.♘b3 ♗d6+ 46.♔e6



46...♗h2 47.♘d4+ ♔c5 48.♘xf5+–

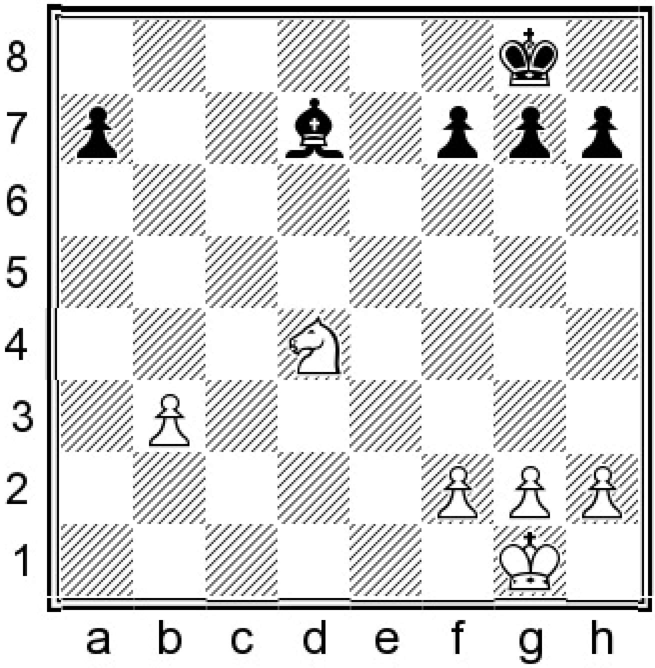
White was imprecise in the exploitation of his advantage and the game continued for another 40 moves, but he won in 82 moves.

Pattern 57 No central pawns

In positions with no central pawns and pawns on both wings, the bishop has an appreciable advantage over the knight, as we shall see in the following examples. As is the case with numerous other patterns, having studied several such positions we are left with the feeling that, in the absence of some other advantage for the strong side, a draw is the correct result.

I must confess that when I saw the next ending for the first time it made a big impression on me. Is it possible for this kind of position to be won? It seems not, but what these positions make clear to us is that in practice the chances of winning are very great.

Gösta Stoltz
Isaac Kashdan
The Hague ol 1928



Black to move

28...♔f8

In the first phase, both kings rush forward to see which of them will take up the more dominant position. Often, being able to advance one file further than the opponent is decisive.

29.♔f1 ♔e7 30.♔e2 ♔d6 31.♔d3 ♔d5

Black's king has reached the fourth rank. The white king has taken up a post opposite it, but on a light-coloured square. The second phase (for Black) consists of giving check with his bishop and thus forcing his opponent to choose which wing to go to, after which the black king will invade on the other wing.

32.h4?!

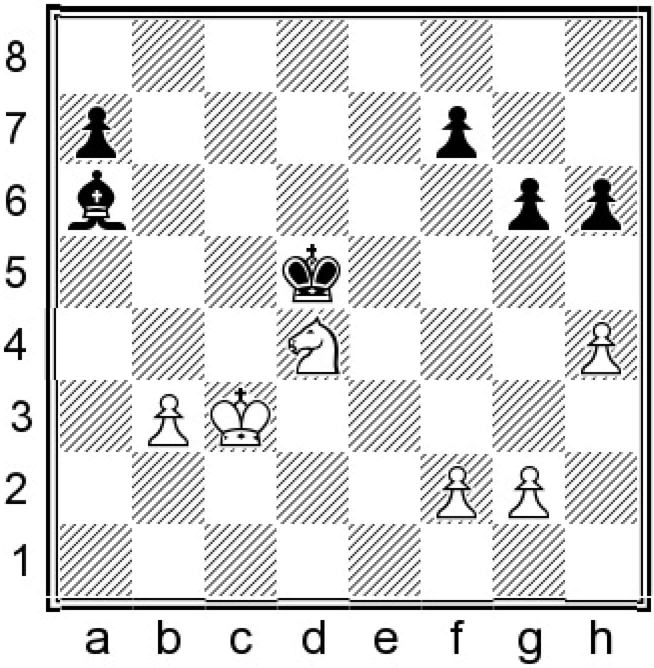
This advance unnecessarily weakens White's kingside pawn chain. It could be justified by thinking that it is necessary to gain a little space, in anticipation of the future advance of the black pawns. Let us therefore analyse what would happen if White just waits and Black advances his pawns: 32.♔c3 g5 33.♔d3 (33.♘c2 ♔e4 34.f3+ ♔e5 35.♘d4 is a similar option) 33...f6 34.♔c3 (34.f3 h5 35.g3) 34...h5 35.♔d3 h4 36.f3! (36.♔c3?! h3 37.g3? ♔e4–+; 36.h3 ♗c8! 37.f3 ♗a6+ 38.♔e3 ♗f1–+) 36...♗c8 (36...h3 37.g3) 37.g3 a5 38.♔c3 ♗b7 39.♔d3 ♔c5 40.♔c3 ♗d5 41.♔d3 ♔b4 42.♔c2 ♗b7 43.♔d2, and no progress is apparent.

32...♗c8 33.♘f3

I see no need to move the knight, since in response to a check the white king can in fact move in either direction without any problems. 33.♔c3! ♗a6 34.f3 is the defensive line offering the greatest resistance: 34...f6 35.g3 g6 36.♘c2 ♔e5 37.♔d2 ♗b7 38.♔e3 ♔d6 39.♘d4 ♔c5 40.♔d3 ♔b4 41.♔d2 and it seems that White's defensive set-up cannot be breached, e.g. 41...♗d5 (41...♗c8 42.♔c2 ♗d7 43.♔d2 h5 44.♔c2 g5 45.♔d2=) 42.♔c2 ♗f7 43.♔b2 ♔c5 44.♔c3.

33...♗a6+ 34.♔c3 h6 35.♘d4 g6?!

I think Black should have taken the opportunity to advance the king to a square from which it is difficult to be expelled: 35...♔e4!.



I am inclined to think that it was here that the decisive mistake was made:

36.♘c2?

36.f3! ♗b7 37.g3 reconstructs the robust defensive position, similar to the one we have seen in the notes to earlier moves.

36...♔e4!

From now on, the black king has a very dominant position and there are numerous weaknesses (g2 can be attacked by the bishop and h4 can soon come under attack from the king). Defence becomes difficult, if not impossible.

37.♘e3 f5!?

Having gained a dominant position with his king, Black seeks to create new weaknesses in White's right flank. Another promising idea was 37...h5!?, e.g. 38.♘c2 f6 39.♘e3 g5–+.

38.♔d2 f4! 39.♘g4 h5 40.♘f6+ ♔f5 41.♘d7?!

This makes Black's task easier.

A) 41.♘d5 ♗b7 42.♘e7+ ♔f6! 43.♘g8+ ♔f7 44.♘h6+ ♔g7–+;

B) 41.♘h7!? was the most tenacious now, but after 41...♔g4 42.♘f8 ♔xh4 43.♘xg6+ ♔g5 44.♘e5 ♔f5 45.♘d7 h4 (idea: ...f4-f3) 46.♘c5 ♗f1 Black's h-pawn will queen very soon.

41...♗c8 42.♘f8

It is interesting to observe the powerlessness of the knight to defend White's weaknesses when it lacks a secure outpost. If 42.♘c5 ♔g4 43.♘d3 ♗f5, winning the h-pawn.

42...g5! 43.g3

43.hxg5 ♔xg5 and the black knight is dominated: 44.♔d3 h4 45.f3 (the only move to defend against the threat of 45...f3) 45...a5! (45...♔h6 46.♔e4 ♔g7, winning the knight) 46.♔e4 ♔f6 47.♔xf4 ♔g7 48.♔g5 ♔xf8 49.♔xh4 ♗e6–+.

43...gxh4 44.gxh4 ♔g4

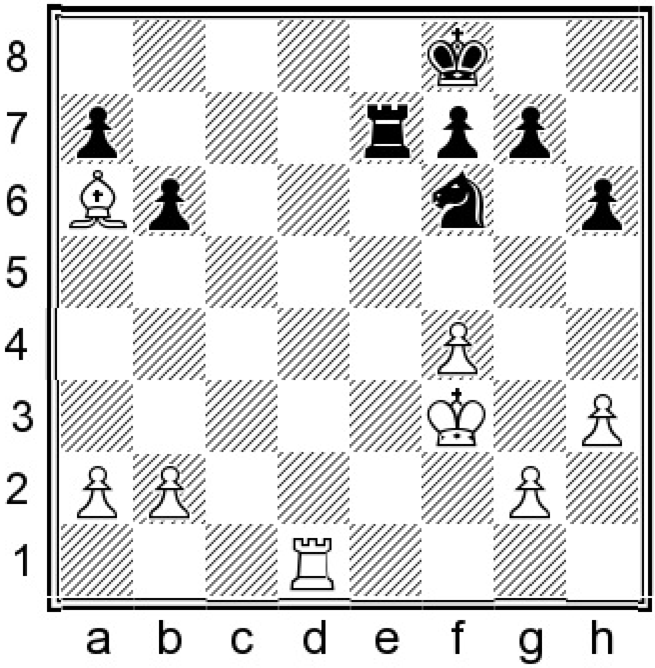
With the imminent fall of the h-pawn, the win is simple.

45.♘g6 ♗f5 46.♘e7 ♗e6 47.b4 ♔xh4 48.♔d3

Here 48.♔e2! would at least have prevented the promotion of the h-pawn, but after for example 48...♗c4+ 49.♔f3 ♔g5 50.♘c8 ♗d5+ 51.♔e2 a6 52.♔f1 ♔f5 the position has been transformed to one of *distant passed pawn* and the black king dominates the board, whereas its white counterpart is confined to the inferior right-hand corner.

48...♔g4 49.♔e4 h4 50.♘c6 ♗f5+ 51.♔d5 f3 52.b5 h3 53.♘a7+ h2 ... 0-1

Garry Kasparov 2740
Anatoly Karpov 2705
London WCh 1986 (m/10)



White to move

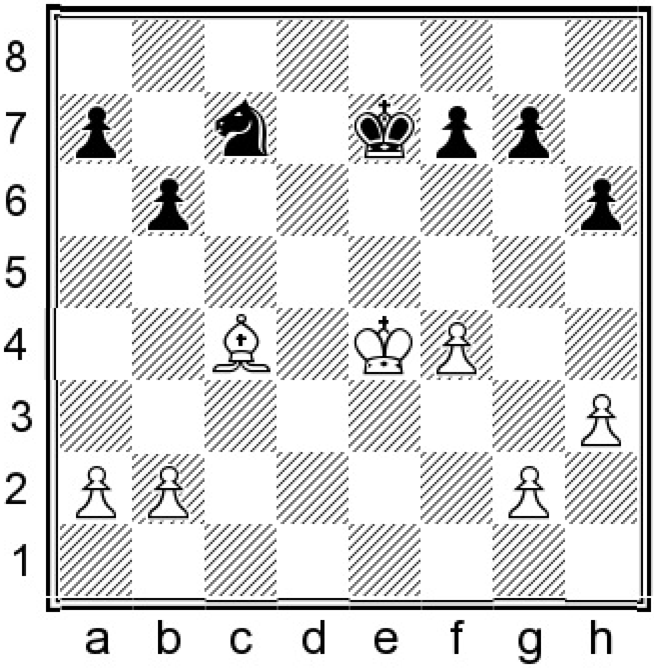
Kasparov regretted exchanging the rooks here, admitting that the minor piece ending is a draw.

30.♖d8+ ♖e8 31.♖xe8+! ♘xe8!

This capture suggests that Karpov already seemed to know the defensive system.

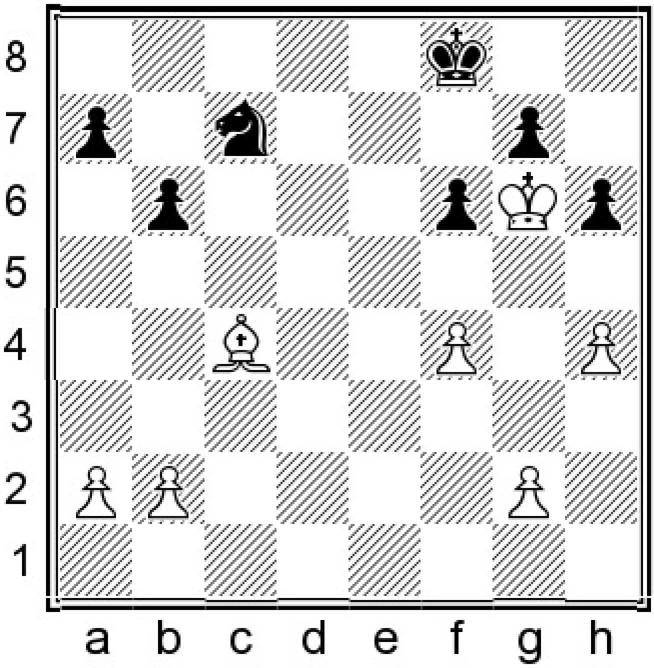
32.♔e4 ♔e7 33.♗c4 ♘c7!

33...♘d6+?! 34.♔d5 ♘xc4 35.♔xc4 would have been an unwise decision, although the pawn ending is not lost. We studied this earlier under the theme of the dominant king in pawn endings.



With the knight on c7 and the pawns on b6 and f6 Black creates a *barrier*. This seems to be the most effective method of defence in such positions, although, as we shall see, it can suffer due to the existence of some zugzwang positions. Since the knight and the pawns defend their territory perfectly well, White needs to create another weakness, and this has to be on the kingside.

34.♔e5 f6+ 35.♔f5 ♘e8 36.♔e4 ♘c7 37.h4 ♔d6 38.♔f5 ♔e7 39.♔g6 ♔f8

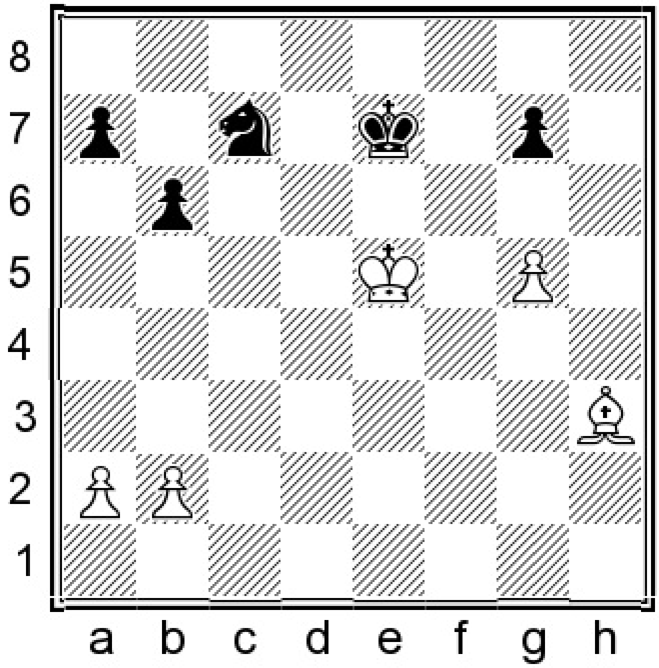


White has made as much progress as possible on the kingside. It only remains to try advancing his pawns. There are many ways to do this, although it is always going to be based on the g4-g5 break. Then after the double exchange on g5 (unavoidable for Black) White can leave his last kingside pawn on g5, h4 or f4.

Furthermore, the queenside structure can also vary, with the pawns on a3 and b4, b3 and a4, or a4 and b5. This gives rise to infinite possibilities, making the analysis very difficult, but most of them are covered in the following lines.

40.♔f5

Or 40.g4 ♘e8 41.g5 hxg5 42.hxg5 fxg5 43.fxg5 (now White has managed to weaken the e5-square, in a similar way to the e4-square in the previous ending) 43...♘c7 44.♔f5 ♔e7 45.♔e5 ♔d7 46.♗f1 (it is necessary to prepare a check) 46...♔e7 47.♗h3.



analysis diagram

This looks like the decisive zugzwang, but the counterattack succeeds in drawing: 47...♘e8 48.♔d5 ♘c7+ 49.♔c6 ♘e6 50.♗xe6 ♔xe6 51.♔b7 ♔f5 52.♔xa7 ♔xg5 53.♔xb6 ♔f4 54.a4 g5, with a drawn queen ending, although there is still work to be done.

40...♔e7 41.♔e4 ♔d6 42.g4 ♔e7 43.b4

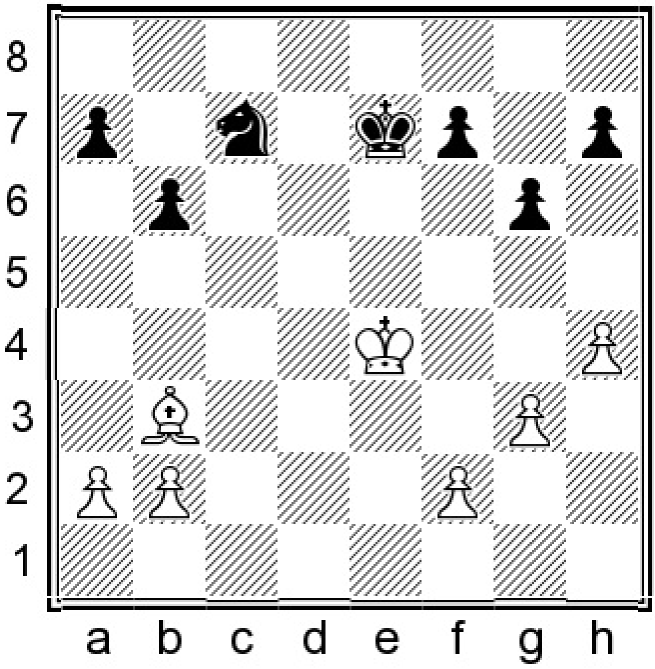
43.a3!? ♔d6 44.♔f5 ♔e7 45.♔g6 ♔f8 46.g5 fxg5 47.fxg5 hxg5 48.♔xg5 represents the most that White can achieve, but the black pieces remain capable of defending their fortress: 48...♔e7 49.♔g6 ♔f8 50.♔f5 ♔e7 51.♔e5 ♔d7 52.♗f1 ♔e7 53.♗h3 (the typical zugzwang) 53...♘e8 54.♗g4 (54.♔d5 ♘d6 55.♔c6 ♘c4=) 54...♘c7 55.b3 ♘e8 56.a4 ♘c7 57.♗h3 (the culminating point of the zugzwang) 57...♘a6! (once again, Black must seek to counterattack: 57...♘e8?! 58.♔d5 and Black could well be losing now) 58.♗e6 ♘b4 59.♗c4 ♘c6+ 60.♔d5 ♘b4+ 61.♔e5 ♘c6+ 62.♔f5, and there is no way in.

43...♔d6

And White acquiesced to the draw.

Now we shall analyse a similar ending.

Pal Benko
Bruno Parma
Belgrade 1964 (4)



White to move

Is this not the same ending as Kasparov-Karpov? No. There is an important difference: the pawn is on g6, and since the f-pawn cannot remain on f7, this difference is substantial.

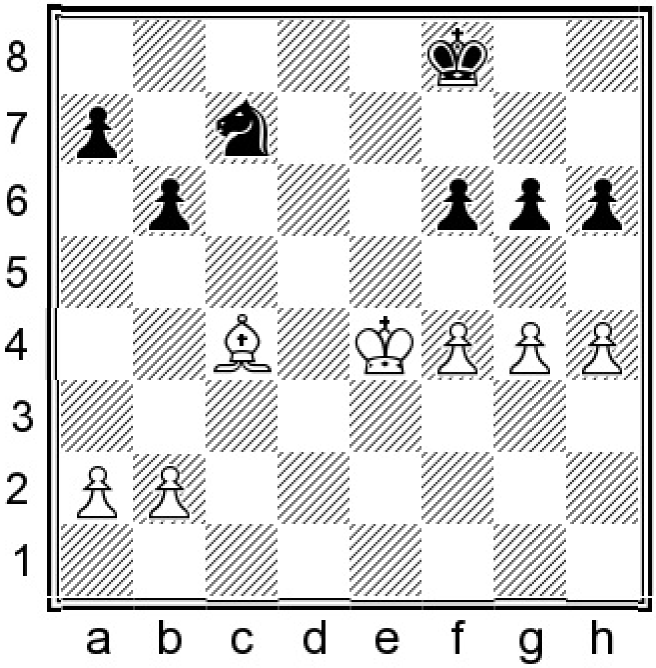
32.f4 h6 33.♗c4!

A characteristic manoeuvre. The bishop restricts the knight and puts pressure on f7.

33...♘e6 34.g4 ♘c7 35.♔e5!

Zugzwang. The black pieces are unable to move without allowing the advance of the white king. New concessions are unavoidable.

35...f6+ 36.♔e4 ♔f8



37.h5?!

Breaking the rule, White places a pawn on a square of the same colour as the bishop. The objective is to achieve domination of the important point e5 for the king. That will serve as a pivot for the attack, on one wing or the other.

37.g5!? gains the e5-square immediately, but exchanges too many pawns: 37...hxg5! 38.fxg5 (38.hxg5 ♔e7, with the threat of ...fxg5 and ...♘e6, drawing) 38...♔e7 39.gxf6+ ♔xf6 40.b4±.

However, in view of the counterplay which the knight can create against the pawn on h5, prophylaxis with 37.♗b3! seems the most appropriate option.

37...g5?

Further confirmation that the defence is uncomfortable. After 37...gxh5! 38.gxh5 it seems that White will be able to continue with ♔f5, zugzwang and victory, but... 38...♘e8! 39.♗d3 (39.♔f5) 39...♘g7 40.♗e2 ♔e7 41.♔d5 ♘e6 initiates counterplay which should lead to a draw.

38.fxg5 fxg5 39.♔f5 ♔g7 40.♔e5

The king’s entry on the queenside is inevitable.

40...♘e8 41.♗e6 ♘f6 42.b4! ♘e8 43.b5

White places all his pawns on squares of the same colour as his bishop. This is not the only way to win, but since the white king’s penetration to a7 is inevitable, White will be better prepared to break immediately and thus queen his b-pawn.

43...♘f6 44.a4 ♘e8 45.♗f5 ♘f6 46.♔e6 ♘e8 47.♗e4 ♘f6 48.♗f3

Domination.

48...♘g8 49.♔d6 ♔f6 50.♔c6 ♔e7 51.♔b7 ♔d6 52.♔xa7 ♔c5 53.♔a6 ♘f6 54.♗c6 ♘xg4 55.a5 bxa5 56.b6 ♘e5 57.♗e8

Black resigned.

We shall conclude with a few observations which can be drawn from these three examples:

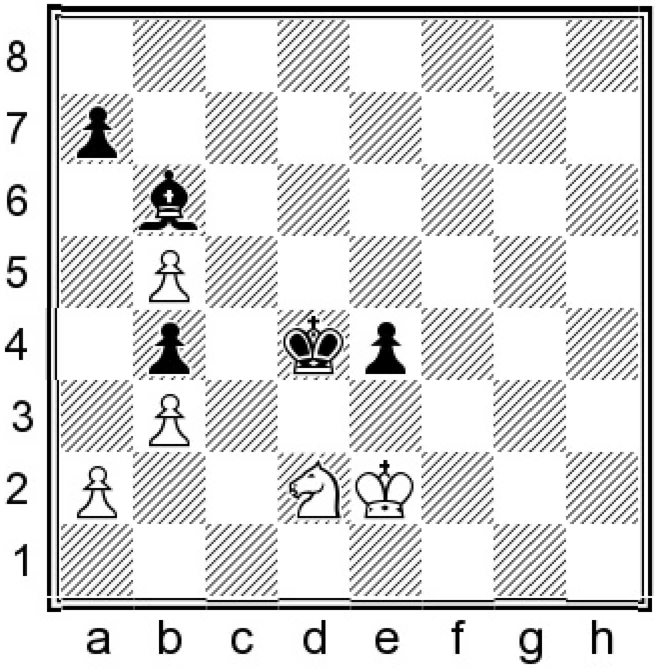
- The creation of a barrier with the knight is the best defensive method.
- The barrier defence can fail, if there is another weakness or due to zugzwang, and in that case it is essential to be prepared to counterattack.
- Any pawn advanced one square further can be the additional weakness which makes defence impossible.

Pattern 58 A king stuck in front of the rook's pawn

When the king takes an enemy rook's pawn, transforming his own into a distant passed pawn, it runs the risk of being trapped in the corner by the enemy king. This theme occurs in several endings, but it is especially common in bishop vs knight endings, because the bishop contributes little to the liberation of the king.

We shall look at some examples, which always consist of few moves when the king has already captured the pawn, but which can be much longer when the decision to go for the pawn or not is delayed for many moves.

Boris Spassky
Mikhail Botvinnik
USSR tt 1966



White to move

White has a delicate position. His pieces have to attend to Black's central passed pawn and he has a weakness on a2. But this is a special type of weakness which allows a very specific defence: this consists of allowing the pawn to be captured and then imprisoning the opponent's king on the rook's file. This pattern often works well in pawn endings or knight vs bishop endings.

62.♘c4?

It seems strange that Spassky failed to find the solution, at a time when the rate of play was slow and games were even adjourned. 62.♘f1! ♔c3 63.♘g3 attacks the pawn and stands ready to go to e2 to block the pawn: 63...e3 64.♔d1 ♔b2 (64...♔d3 65.♘e2 and White waits in the blockade position. There is no possible progress, hence a draw) 65.♘e2 ♔xa2 66.♔c2, and the black king remains imprisoned on a2, while the knight deals with stopping the pawn.

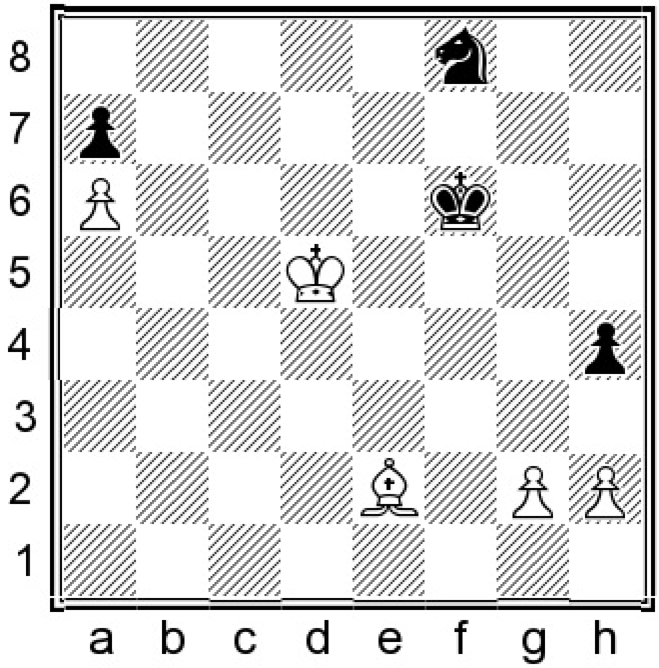
62.♘c4? ♔c3 63.♔d1 ♗d4!

Black prepares ...♔c3-d3-e3 and the knight is a long way from the blockading square e2. Now Black wins. The continuation only interests us as a contrast to our theme.

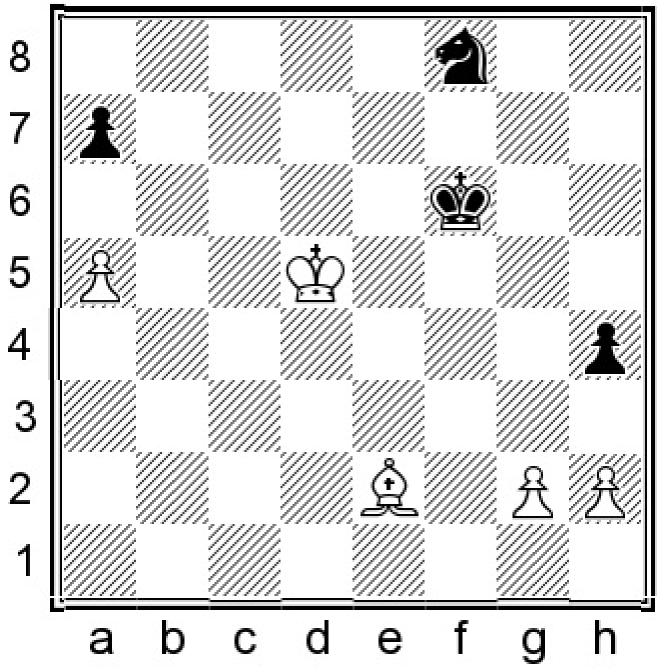
64.♔e2 e3 65.♘a5 ♔b2 66.♘c6 ♗c5 67.♘e5 ♔xa2 68.♘d3 ♗e7

White resigned here. He can capture the passed pawn but after 69.♔xe3 ♔xb3 70.♔d2 ♔a2 there is no time to establish a blockade of the new passed pawn on b3.

Twin positions



Smyslov–Gurgenidze



Comparison diagram

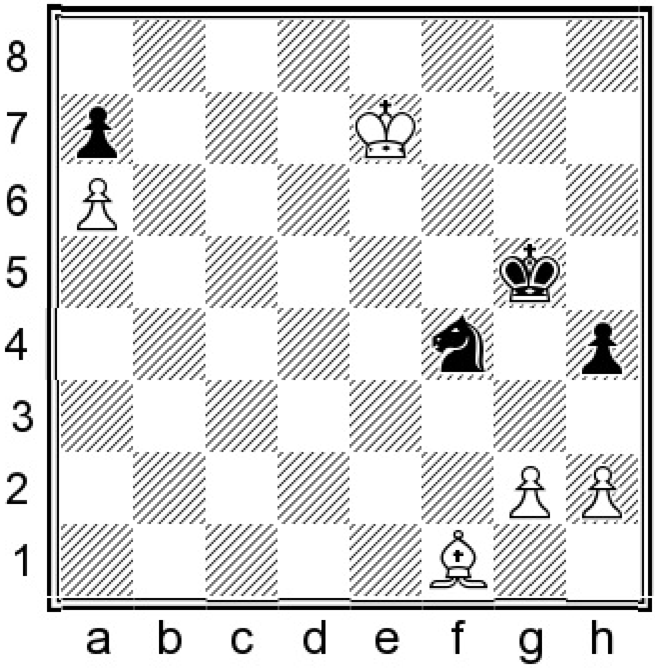
In these two positions there is only one small difference, but the result is completely different. The first position arose in the game Smyslov-Gurgenidze, Tbilisi 1966, which continued:

47.♔e4

47.♔c6 would be the normal plan, which White ignores throughout the game. Smyslov understood that after 47...♔e7 48.♔b7 ♔d6 49.♔xa7 ♔c7 there is no way to extricate his king from the corner. All Black needs to do is exchange one pawn on the kingside and blockade the other one with the knight.

The rest of the game does not merit any great commentary.

47.♔e4 ♔g5 48.♔d5 ♔f6 49.♗g4 ♘g6 50.♗f3 ♘f4+ 51.♔e4 ♘e6 52.♗e2 ♔g5 53.♔e5 ♘f4 54.♗f1 ♘g6+ 55.♔e6 ♘f4+ 56.♔e7



56...♘g6+

This is an interesting moment. Black had such confidence in his defensive system that he did not calculate the consequences of the bishop sacrifice in the variation 56...♘d5+ 57.♔d7 ♘e3 58.♔c7!? ♘xf1 59.♔b7 ♘e3 60.♔xa7 and now with a precise manoeuvre the knight enters the correct circuit for stopping the a-pawn: 60...♘f5! 61.♔b8 ♘d4! 62.♔b7 ♘b5=.

57.♔d6 ♔f6 58.♗c4 ♘e5 59.♗e2 ♘g6 60.♔c6 ♔e7 61.♗h5 ♘f4 62.♗f3 ♘e6 63.♗e4 ♘f4 64.♔c5 ♔f6 65.♔d6 ♘e2 66.♗c6 ♘f4 67.♗b7 ♘e2 68.♗c8 ♘f4 69.g3

Finally Smyslov decides to advance his g-pawn, but now Black will also have the option of reaching a well-known theoretical fortress by sacrificing his knight for the g-pawn and bringing his king to b8.

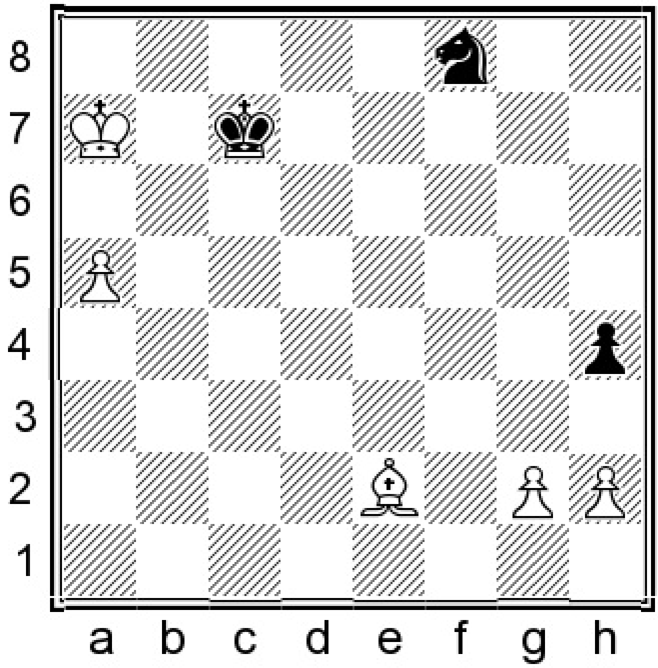
69...hxg3 70.hxg3 ♘e2 71.g4 ♘f4 72.♔c7 ♔e7 73.g5 ♘h5 74.♔c6 ♘g7 75.♗g4 ♘e8 76.♗e2 ♘g7 77.♗c4 ♘e8 78.♔c5 ♘g7 79.♔d4 ♔d6 80.♔e4 ♔c5 81.♗b3 ♔d6 82.♔f4 ♔e7 83.♔e5 ♘h5 84.♔f5 ♘g3+ 85.♔g6?!

Finally White decides to try something, but it allows Black to apply his new defensive method.

85...♘e4 86.♔h6 ♘xg5! 87.♔xg5 ♔d6 88.♔f6 ♔c7 89.♔e7 ♔b8 ½-½

In the second position, the white king will not remain trapped after capturing the a-pawn and White wins easily with the obvious plan:

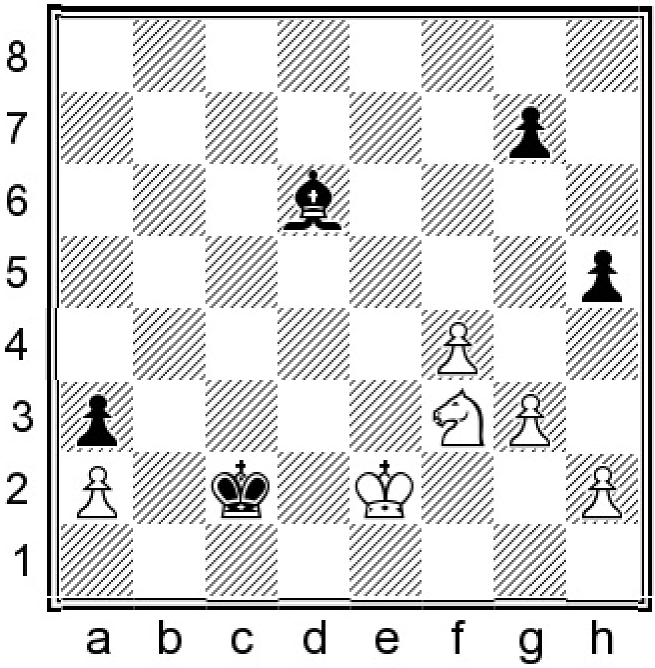
1.♔c6 ♔e5 2.♔b7 ♔d6 3.♔xa7 ♔c7



4.g4 hxg3 5.hxg3 ♘e6 6.g4 ♘g5 7.♔a6 ♔c6 8.♗b5+ ♔c5 9.♔b7+–

Who is playing to win in the following position?

Vasily Ivanchuk 2680
Yasser Seirawan 2635
Tilburg 1990 (1)



Black to move

42...♔b2?!

Perhaps Black wanted to win. It seems simpler to keep the capture of the a2-pawn as a constant threat and continue with waiting tactics.

43.♔d3 ♔xa2 44.♔c2

The black king has been imprisoned. Now it all comes down to a battle between the white knight + pawn majority vs the black bishop. Black has the resource of stalemate available but he also runs the risk of being mated in the corner. Black will have to be very vigilant to achieve a draw.

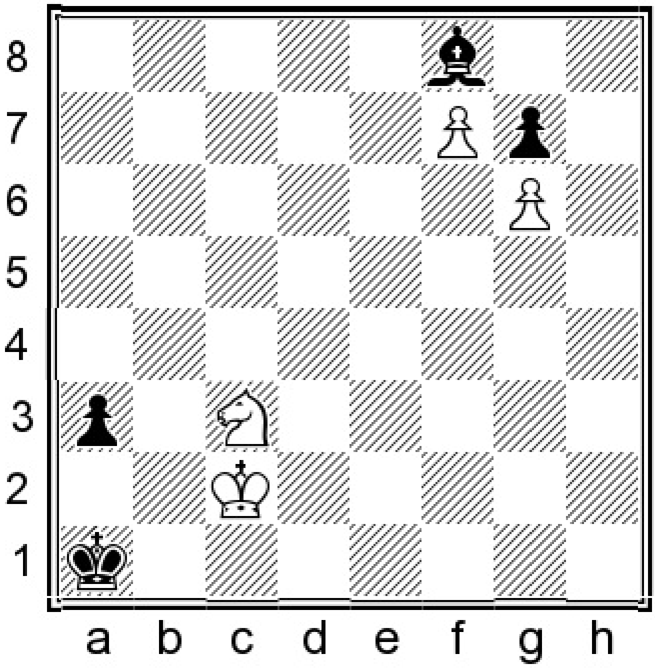
44...♗c5?

The bishop should not have left d6, e.g. 44...g6 45.♘h4 ♔a1 46.♘g6 h4 47.♘xh4 ♗xf4 48.gxf4 a2 and either it is stalemate or the pawn queens. It now takes both players a few moves before they understand the new position but then Ivanchuk sees everything and there will be no way back for Seirawan.

45.f5? ♗e3?

45...♗d6 46.♘d2 h4 47.♘e4 ♗e5 (47...hxg3 48.hxg3 ♗e5) 48.gxh4 ♗xh2 49.h5 ♗e5 and with separated pawns White cannot win.

46.h3 ♗c5 47.♘g5 ♗d6 48.g4 hxg4 49.hxg4 ♗e7 50.♘e4 ♔a1 51.g5 ♔a2 52.g6 ♔a1 53.f6 ♗f8 54.f7 ♗e7 55.♘c3 ♗f8



Black waits for the arrival of the knight in order to sacrifice his bishop and stalemate himself, but now White can release the black king:

56.♔b3

Black's hopes were based on a variation of this type: 56.♘d5 ♗d6 57.♘c7 ♗e7 58.♘e6 ♗d6 and now the naïve 59.f8=♕?? would allow Black to escape with a draw after 59...♗xf8 60.♘xf8 a2=.

56...♗e7 57.♘b5 ♔b1

After 57...a2 58.♘c3 White also captures the pawn.

58.♘xa3+ ♔c1 59.♘c4 ♔d1 60.♘b6 ♔d2 61.♔c4

Black resigned.

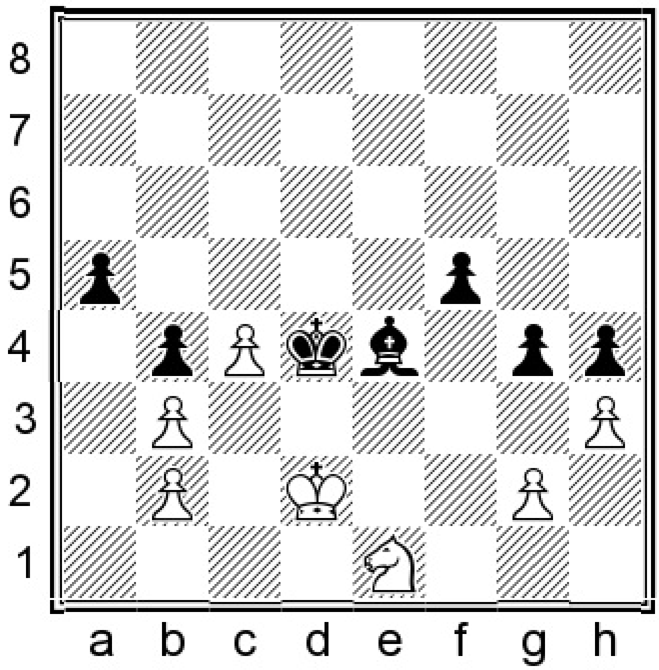
Pattern 59 Making way for the rook's pawn

In several sections we have already come across the fact that the knight has problems with rook's pawns. It is not surprising, therefore, that there are some combinations which take advantage of this deficiency. In the struggle of the bishop against the knight, the possibility of these typical tactical blows hovers over the position and can turn seemingly healthy pawns into permanent weaknesses, thus acquiring a strategic character.

In *100 Endgames You Must Know* I labelled the second square on the long diagonal as *the knight's dumb square*. In bishop vs knight endings there is very often a sacrifice that highlights the clumsiness of the knight on that square.

Eduard Prandstetter 2445

Axel Ornstein 2450
Skara tt 1980 (7)



Black to move

44...♗a8!

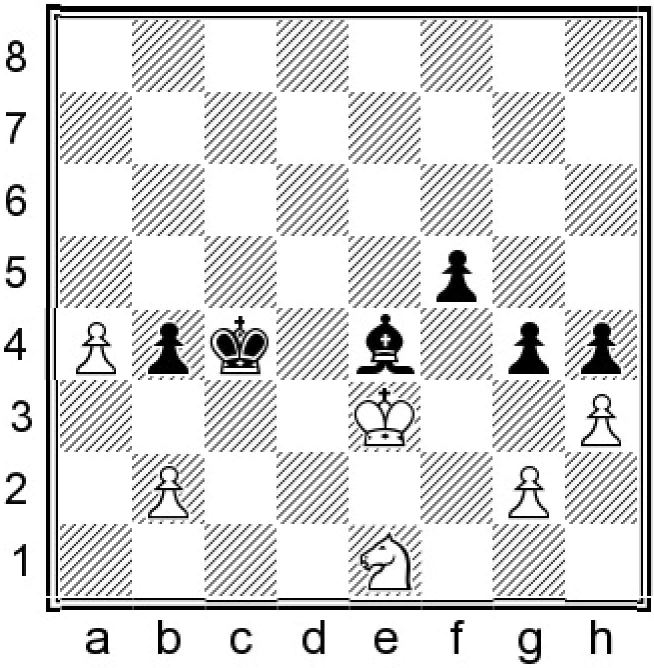
44...♗xg2? is premature, due to the unfortunate position of the black king: 45.♘xg2 gxh3 46.♘e1! h2? 47.♘f3+ and White wins;

but 44...a4! is another winning plan.

44...♗a8! 45.♔e2 ♗e4 46.♔f2 a4 47.bxa4 ♔xc4

The knight is dominated and the white queenside pawns are unable to move without being lost. The white king tries to help.

48.♔e3



48...♗xg2!

This is the thematic sacrifice. White’s misfortune is that after the capture of the bishop he would prefer for his knight not to exist at all, in order to be able to stop the h-pawn with his king.

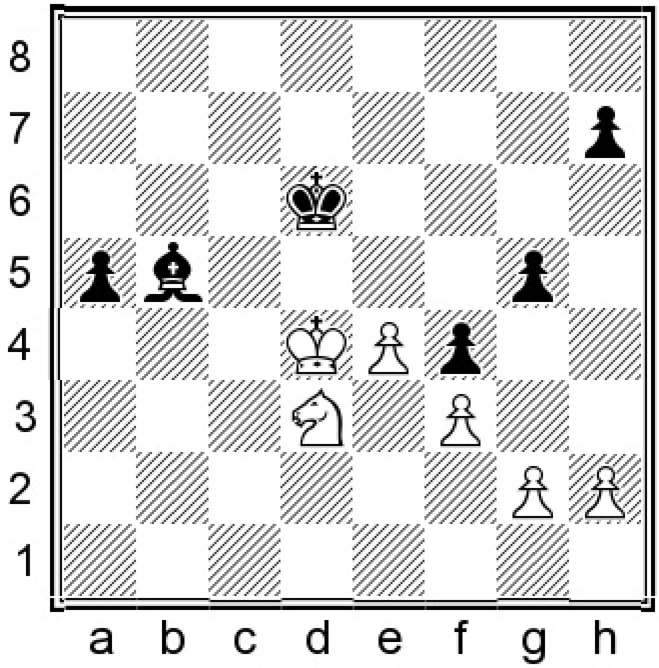
49.♘xg2 gxh3 50.♔f2 h2 51.♘e3+

In this case White has a little resource which enables his king to reach the h-pawn, but it fails.

51...♔d3 52.♔g2 ♔xe3 53.a5 f4 54.a6 f3+ 55.♔xh2 f2 56.a7 f1=♕ 57.a8=♕ ♕f2+ 58.♔h1 ♕f3+

And White resigned.

Marc Kirszenberg 2178
Jean François Jolly 2378
Nancy 2013

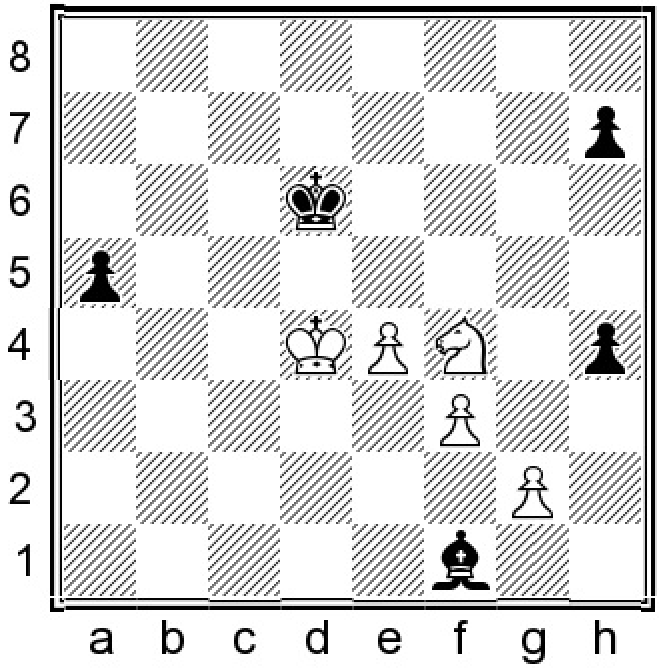


White to move

44.h4?

White wants to eliminate the pawn on f4 and is perhaps dreaming of an ending of bishop + wrong rook's pawn. But it is a very bad idea, because the h4-pawn, combined with the typical bishop sacrifice on g2, is very dangerous. In contrast, 44.♘e5! would have erected a *barrier* and kept the draw in hand, e.g. 44...♔e6 45.♘c4 a4 46.♔c5=.

44.h4? gxh4 45.♘xf4 ♗f1



Now there is no way to prevent the sacrifice. The white pawn chain, apparently so healthy, is diseased at its base (g2).

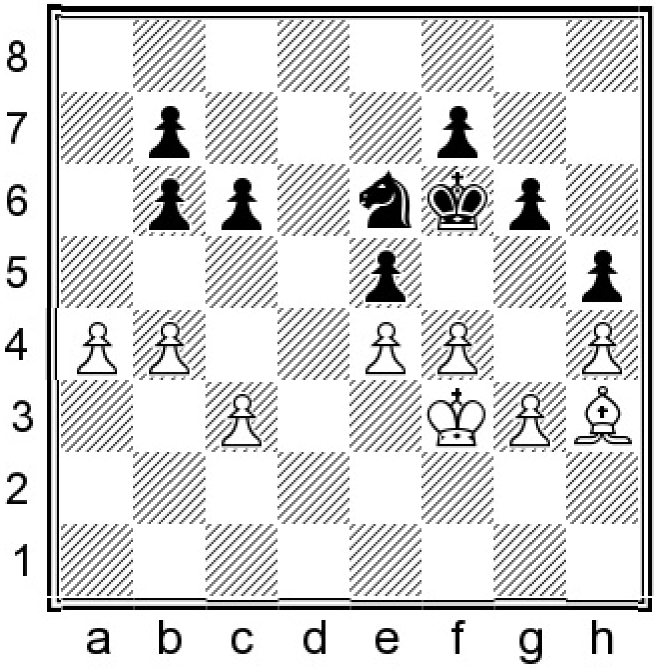
46.e5+ ♔d7 47.♔c5 a4

47...♗xg2! was already possible.

48.♔b4 ♗xg2 49.♘xg2 h3 50.e6+ ♔e7 51.♘e3 h2 52.♘f5+ ♔xe6 53.♘g3 ♔e5 54.♔xa4 ♔f4 55.♘h1 ♔xf3 0-1

Sometimes the possibility of a sacrifice determines the whole play.

Sergey Kudrin 2550
Marcelino Sion Castro 2315
Salamanca 1989



Black to move

Black is really in zugzwang, because he has no way to prevent his position from deteriorating. But the really serious problem is that if the bishop reaches c8 it can capture the pawn on b7, even if the knight is defending it. We could add that with the b6-pawn on a7 Black would have been able to hold the position easily.

40...♘d8

40...b5 leads more or less to the same thing: 41.a5! ♘d8 42.♗c8, followed by ♗xb7.

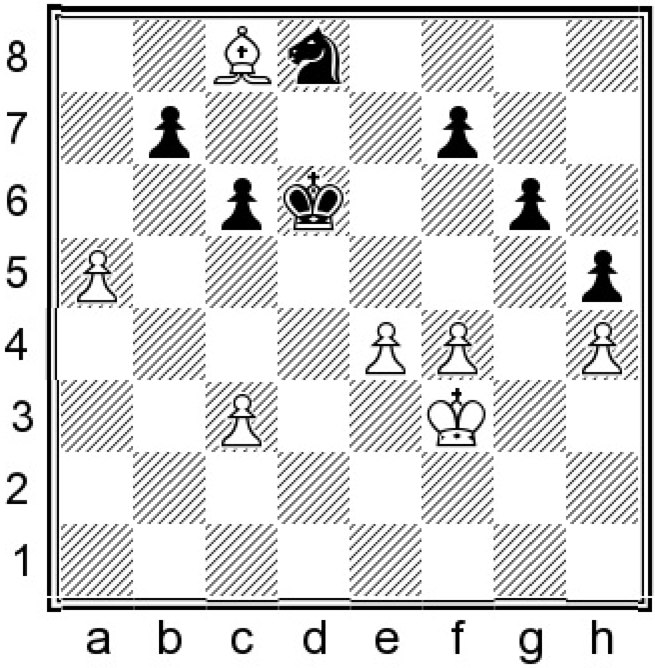
40...c5 was the move in the game, but it creates a highway for the white king via c4 and b5:

41.♔e3!+– cxb4 42.cxb4 ♘d4 43.♔d3 ♘e6 44.f5 ♘d4 45.fxg6 fxg6 46.♗c8 1-0.

40...♘d8 41.♗c8! exf4 42.gxf4 ♔e7 43.a5!

The pawn prepares to make its triumphal advance, following the sacrifice of the bishop.

43...bxa5 44.bxa5 ♔d6

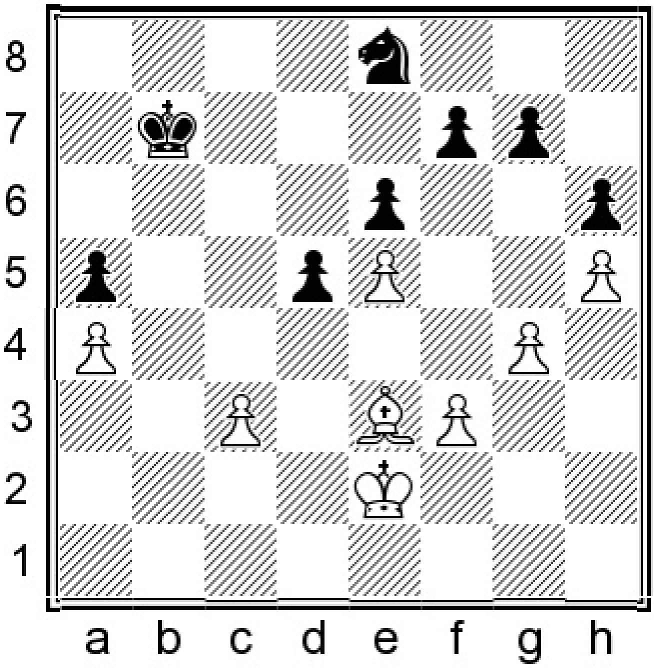


The king is arriving, but...

45.♗xb7! ♘xb7 46.a6 1-0

As so often happens, the knight prevents its king from reaching the passed pawn.

Veselin Topalov 2804
Francisco Vallejo Pons 2666
Leon 2006 (1)



White to move

By setting up this structure, which is quite a common one in the Caro-Kann Defence, White makes the sacrifice of the bishop on g7 almost unavoidable. This sacrificial pattern is so strong for Topalov that he overlooks a similar solution, which contains a subtle move in the middle of it.

40.♗c5

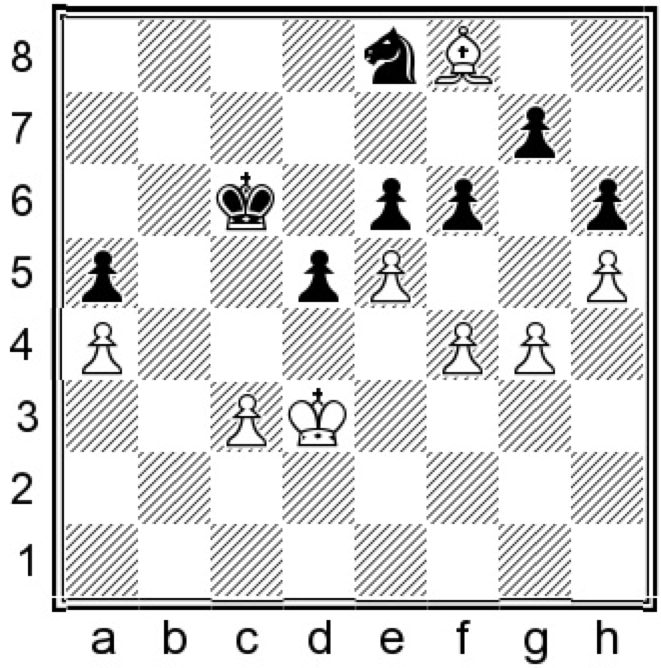
40.♗xh6! gxh6 41.g5 ♘g7 42.gxh6 ♘xh5. Now 43.h7 is not possible due to the check on f4, but with 43.♔e3!! the king deprives the knight of that square and White will queen the pawn.

40.♗c5 f6

40...♔c6 is the other natural move. Then 41.♗f8 ♔d7 42.f4 (with the idea of g4-g5 and ♗xg7) 42...f6 43.♔d3 fxe5 44.fxe5 transposes to the game continuation.

41.f4 ♔c6 42.♗f8 fxe5

Avoiding the exchange of pawns with 42...♔d7 43.♔d3 ♔c6 changes nothing:



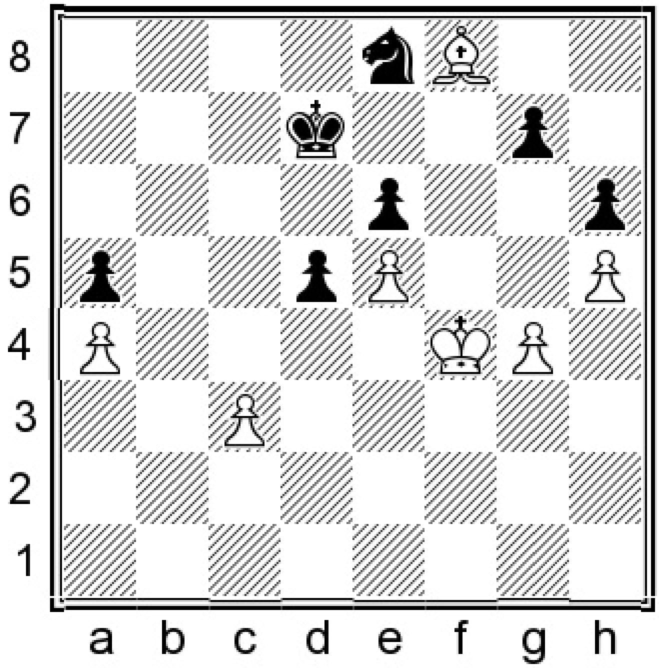
analysis diagram

44.♗xg7!! ♘xg7 45.exf6+–.

43.fxe5 ♔d7 44.♔d3

One of the essential precautions to take in readiness for the sacrifice is to ensure that the king is not exposed to a check by the knight; for instance, here it is not possible to play 44.g5?! hxg5 45.♗xg7?? ♘xg7 46.h6 ♘h5! 47.h7 ♘f4+ and Black wins.

44...♔c7 45.♔e3 ♔c6 46.♔f4 ♔d7



Finally the white king has been deployed on a square where there are no annoying intermediate checks, so the sacrifice is now possible.

47.g5 ♔d8 48.♗xg7! hxg5+

48...♘xg7 49.gxh6 ♘xh5+ 50.♔g5 ♘g3 51.h7 ♘e4+ 52.♔g6+–.

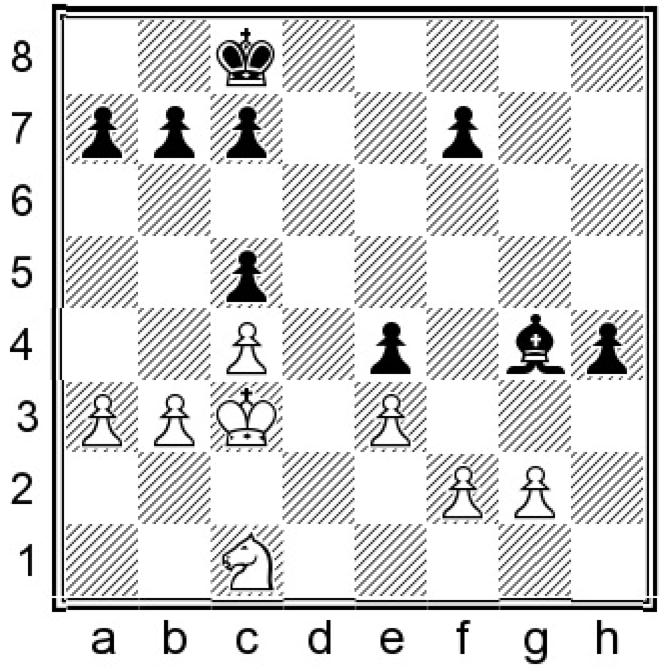
49.♔xg5 ♘xg7 50.h6 ♔e7 51.h7

Black resigned.

The sacrifice is not always on the g7-square, although the objective is always to clear the way for the rook’s pawn to advance.

Let us now view a couple of variations on the same theme *(two diagrams on the right)*:

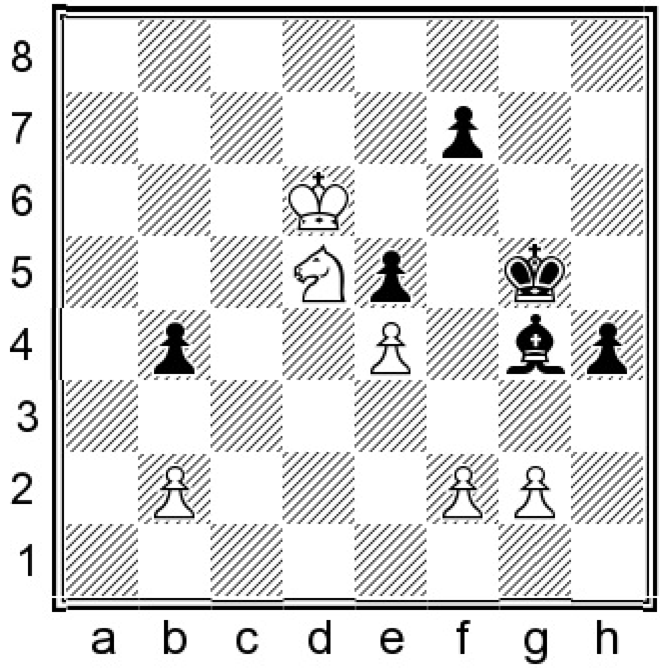
Sergey Ivanov 2359
Vjaino Yakkimaienen 2250
Petrozavodsk 2009 (6)



Black to move

30...♗f3! 31.gxf3 exf3 0-1

Alex Garrido Outon 2339
Manuel Perez Candelario 2612
Linares ch-ESP 2020 (4)



Black to move

49...♗f3 50.♔xe5 ♗xg2 51.f4+ ♔g4 52.♘e3+ ♔f3 0-1

Chapter 9

Knight endings

This crafty piece deftly skips through the mire of tactics, which makes these endings rather disagreeable for many players, but rather than pulling a face it is better to adopt an attitude of being very attentive to the tiny details of each position.

Knight endings have always been marked by Mikhail Botvinnik’s comment ‘knight endings are really pawn endings’. Like many famous comments, it has a grain of truth, and it is curious how much similarity there is, but in both study and practice it is dangerous to interpret it literally.

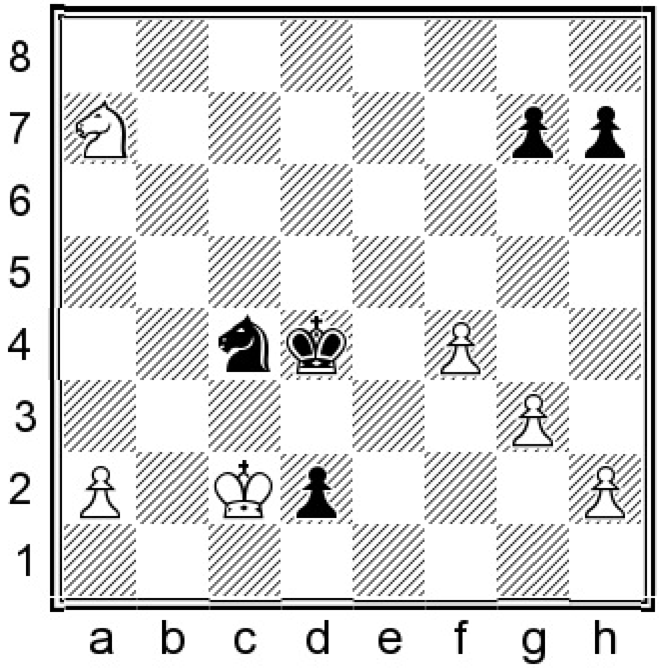
What we can see, even in our own experience, is that some of the themes in pawn endings also occur in knight endings, although without the same strength. Furthermore, new themes appear which would not make sense in a pawn ending. The best thing to do is to study each of the themes with a fresh mind (although this also applies to all the other chapters), and in each one we shall see to what extent the presence of the knight has an influence on the theme.

Pattern 60 Deflection sacrifice

We begin with what seems to be only a tactical theme. The deflection sacrifice, to facilitate the advance of a passed pawn, is possible in any ending, but in knight endings it acquires a special importance. This is because the knight is a piece which, on leaving a certain square, always loses control of the squares it previously dominated. In addition, a knight which controls the square in front of a pawn can have problems controlling the subsequent ones. These characteristics mean that the deflection sacrifice is not merely an accidental tactical resource but can form part of a well-established plan.

We shall begin with what is probably the most famous example of deflection in a knight ending.

Gedeon Barcza
Vladimir Simagin
Budapest 1949 (14)



Black to move

Black's d2-pawn is very dangerous, but it is controlled by the white king and soon the knight will arrive to strengthen the blockade. If possible, Black must act quickly.

49...♔e3

Black threatens 50...♔e2.

50.♘b5

And White, for his part, prepares to give check on d4 (rather than on c3) in that case.

50...♘a3+!

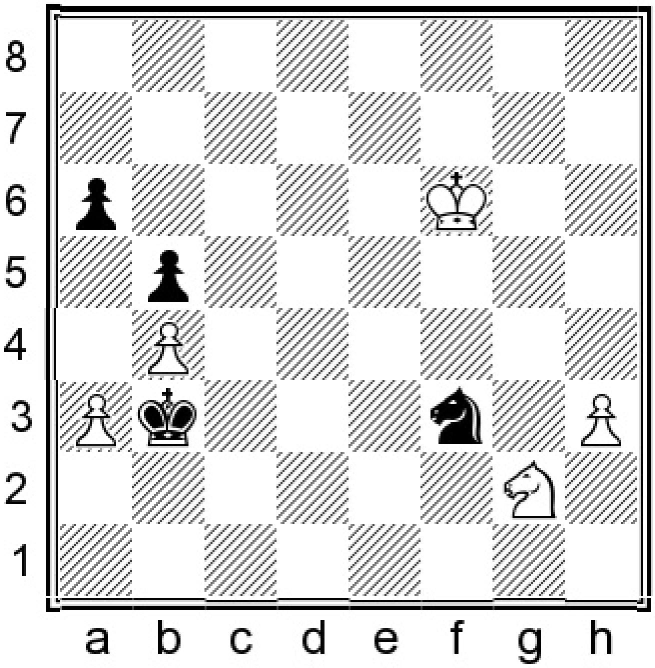
But first Black deflects the white knight. In the event of 50...♔e2?, the natural check 51.♘c3+? loses, as now we have another instructive deflection: 51...♔e1 52.a4 ♘e3+ 53.♔b3 ♘d5!–+. 51.♘d4+! is correct, e.g. 51...♔e1 52.♘f3+ ♔e2 53.♘d4+=.

51.♘xa3 ♔e2

White resigned as promotion cannot be prevented.

In this example the pawn was on the seventh rank; in the following, it is on the third.

Kiril Georgiev 2656
Muris Konjicanin 2261
Sarajevo 2016 (1)



White to move

Black is prepared to sacrifice his knight for the white h-pawn and then liquidate the queenside with his king, so a draw appears likely. But with the black king so distant, the passed pawn is worth more than a knight. White recalls the famous theme of the deflection sacrifice and repeats it insistently:

55.♘e1!!

55.h4? would have been really stupid: 55...♘xh4 56.♘xh4 ♔xa3 with a draw.

55.♘e1!! ♘xe1

Natural, since the knight still appears able to sacrifice itself for the h-pawn, but it loses. However, so do all the alternatives:

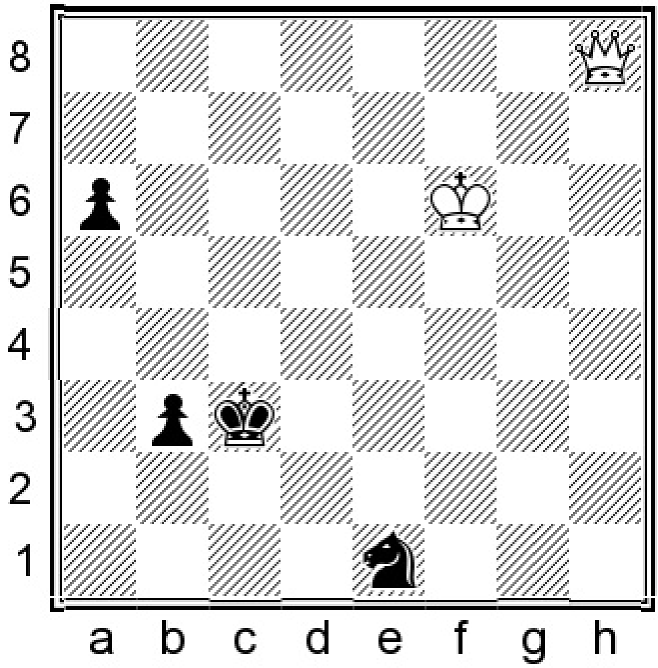
A) 55...♘d2 56.♔f5! (the most technically accurate way, although in fact 56.h4 ♘e4+ 57.♔e5 ♘g3 58.♔f4 also wins) 56...♘c4 57.h4 ♘d6+ 58.♔g6 and the knight is unable to stop the rook's pawn;

B) 55...♔xa3 might make sense, trying to create counterplay by using White's idea against him, but after 56.♘xf3 ♔xb4 57.h4 a5 58.h5 a4 White can use his knight to hold up the black pawns: 59.♘e1 ♔b3 60.h6 a3 61.♘d3! ♔c2 62.h7 ♔xd3 63.h8=♕, with a winning ending.

56.h4 ♔xa3

Black does not even try to approach with the knight: 56...♘c2 57.h5 ♘e3 58.♔g5! (White places the king at what we call *the magic distance* from the knight, so that it cannot come any closer) 58...♘c4 59.h6 ♘d6 60.h7 ♔xa3 61.♔g6+–, the *second magic distance*.

57.h5 ♔xb4 58.h6 ♔c3 59.h7 b4 60.h8=♕ b3

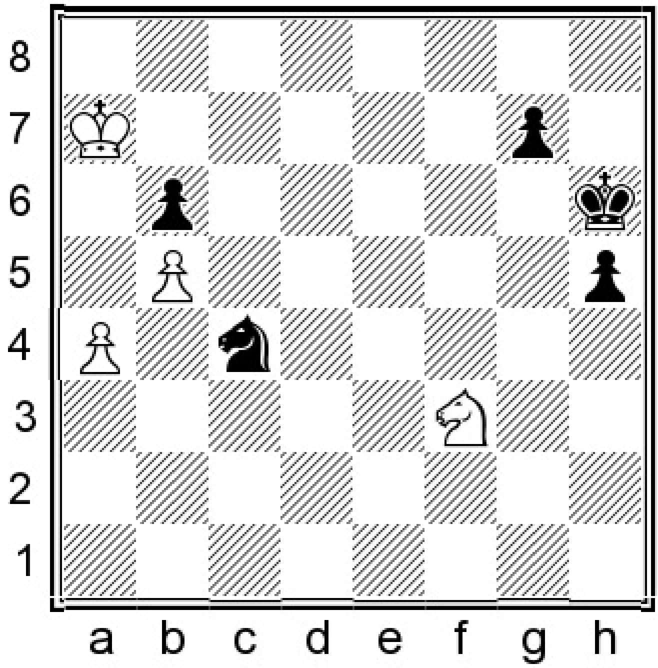


Sometimes a knight with a pawn on the seventh rank can defend against a queen. Here, with the pawn only on the sixth, it is more difficult, but nevertheless White needs to play accurately:

61.♔e6+ ♔c2 62.♕h2+ ♔c1 63.♕f4+ ♔c2 64.♕f2+ 1-0

The deflection sacrifice which arose in the following game, featuring a theoretical but nevertheless paradoxical manoeuvre to queen the knight's pawn, is possibly the most extraordinary on record.

Laszlo Szabo
Attila Groszpeter
Kecskemet 1984



White to move

1.♘d2!!

The knight is sacrificed to allow the pawn break a4-a5. The sacrifice is totally necessary and it wins by a whisker:

1...♘xd2

1...h4?! fails due to the position of the black king, which allows an *accelerator check*: 2.♘xc4 h3 3.♘e3!+– (3.♘e5 ♔h5 4.♘d3 also wins).

2.a5

The game appears to have been adjudicated here. A normal continuation would be:

2...bxa5

2...♘c4 3.a6! and the race ends with the white queen on a8 preventing the promotion of the black pawn on h1.

3.b6 ♘c4 4.b7 ♘e5

The knight prevents immediate promotion, but with a knight's pawn there is a way to evade the knight's vigilance:

5.♔b8! ♘c6+

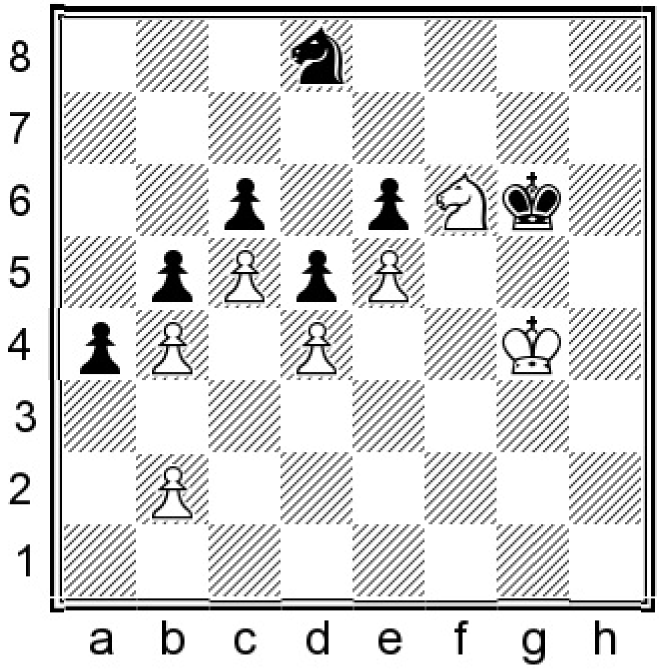
Or 5...♘d7+ 6.♔c8!+–.

6.♔c7 ♘b4 7.♔b6 ♘d5+ 8.♔c6 ♘b4+ 9.♔b5+– 1-0

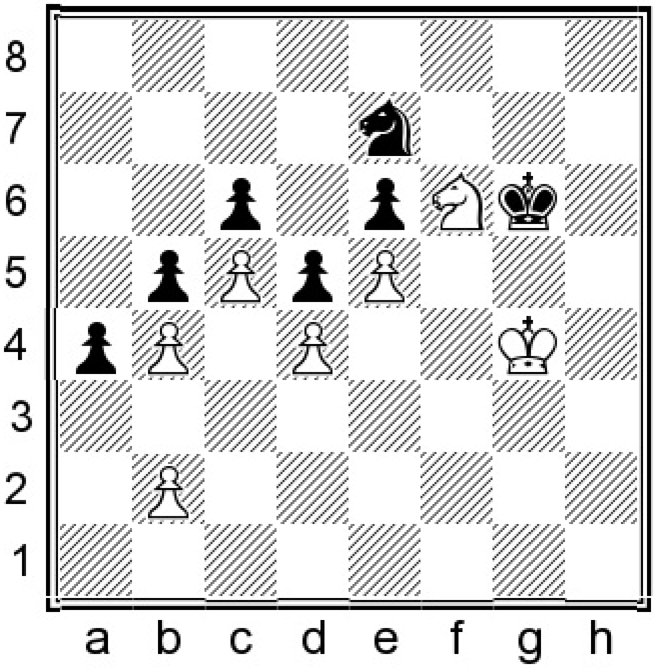
Pattern 61 Space advantage

Space advantage has more influence in the middlegame than in the endgame, but it can be important in knight endings. This becomes apparent, above all, when the knight is on a bad circuit, because with little space it can be difficult for the knight to move to a better one and it might even remain permanently stuck there.

Igor Polovodin
Hristo Mlechev
Asenovgrad 1985



White to move



Comparison position

We have two diagrams which are almost the same. In the first, from a real game, White's only advantage is one of space, but the black knight is very poorly situated (see the comparison diagram with the knight on e7). In a pawn ending a draw could be agreed, but with the knights, White can keep repeating the manoeuvre of checking with the knight followed by penetration with the king:

1.♘h5

Preparing the first check on f4.

1...♔h6 2.♘f4

In effect the first check.

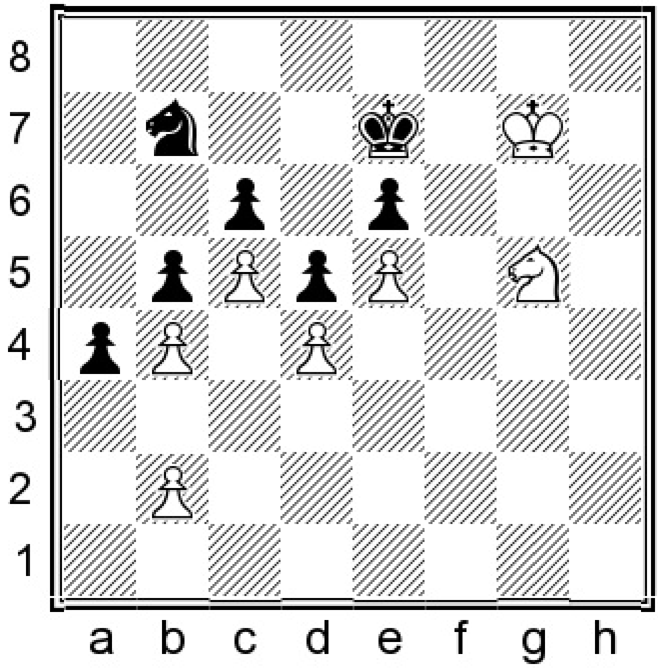
2...♔g7 3.♔h5 ♔h7 4.♔g5 ♔g7 5.♘h5+

The second check.

5...♔f7 6.♔h6 ♘b7 7.♘f4 ♘d8 8.♘h3 ♘b7 9.♘g5+

The third check, preparing the white king's third step forward.

9...♔e7 10.♔g6 ♘d8 11.♔g7 ♘b7



12.♘f3

12.♘f7! would have brought about an unusual domination of the black knight and would probably have ended the game immediately.

12...♘d8 13.♘h4 ♘b7 14.♘g6+ ♔d7 15.♔f6 ♘a5

A desperate decision.

16.♘f8+

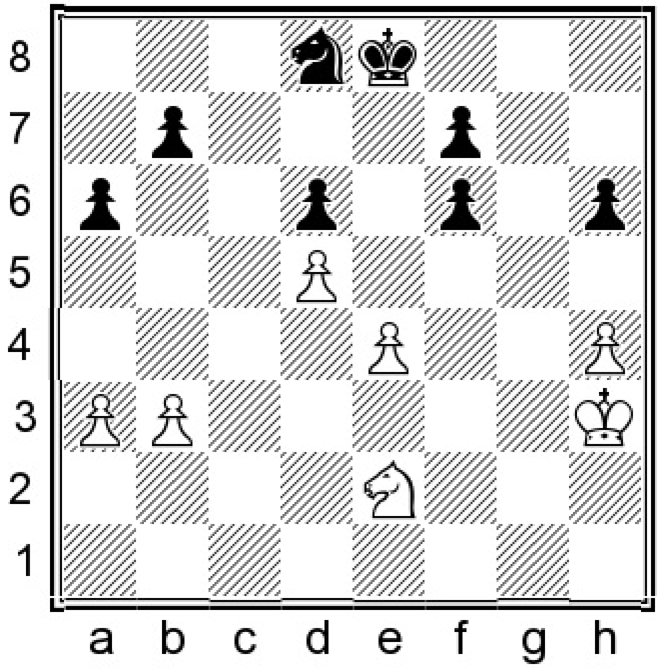
16.bxa5?, although winning, would have given Black strong counterplay, because it is impossible to prevent the promotion of the black pawn.

16...♔c8 17.♘xe6 ♘c4 18.♘g7 ♘xb2 19.e6 a3 20.e7 a2 21.e8=♕+ 1-0

In the second (invented) position, Black is better, even with White to move, which reveals to us that it can make all the difference whether the knight is on a good circuit or not.

Now we shall see one of the greatest endgame players in modern chess in action.

Ulf Andersson 2580
José Carlos Ibarra 2437
Ciudad Real 2004 (3)



Black to move

Here we have a good example of how a space advantage is more important in knight endings than in other types, because a knight can be left completely immobilised.

We can see that the white pawn on d5 deprives the black knight on d8 of the only two squares to which it can now move. If it managed to reach b7, White would once more restrict it with b3-b4. For this reason, Black tries desperately to move it to f7:

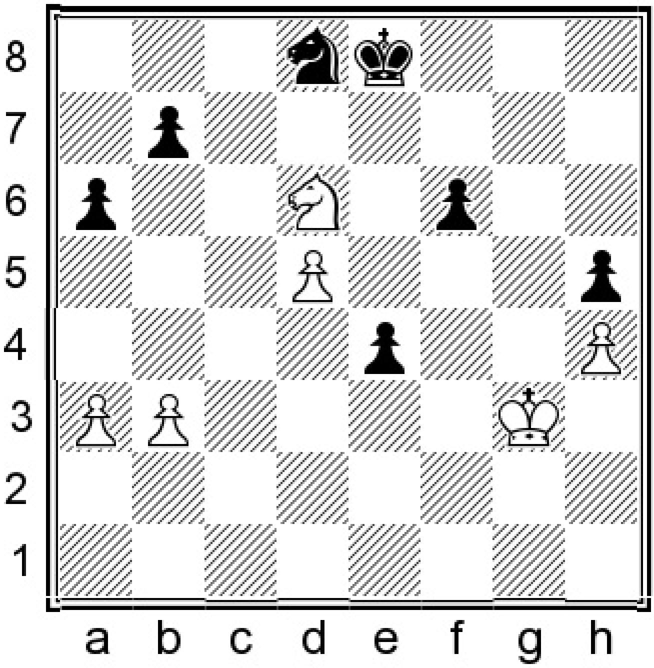
32...f5 33.♘g3!

I recall that when I was watching this game live, all White's manoeuvres impressed me, including this move and the next, but in fact they are not the strongest. What really should have impressed me is the position reached with his prior strategy. The more prosaic 33.exf5! was even stronger, e.g. 33...f6 34.♔g4 ♘f7 35.♔h5+–.

33...fxe4 34.♘f5?!

This is very elegant, but it was stronger to play 34.♘xe4 ♚e7 35.♔g4 b5 36.♔f5 a5 37.b4! and Black cannot move, for example 37...axb4 38.axb4 f6 39.♘c3! ♘f7 40.♘xb5 ♘e5 41.♘d4+–.

34...h5 35.♔g3 f6 36.♘xd6+



36...♔d7

36...♔e7 was more tenacious because if White regains the second pawn with 37.♘xe4?! (37.♘f5+! is much better, followed by ♔f4), then with 37...♘f7 Black's knight becomes active, with good drawing chances.

37.♘xe4 f5

Other moves are no better, for example 37...♔e7 38.♔f4 ♘f7 39.♘g3+–; or 37...♘f7 38.♘xf6+ ♔d6 39.♘xh5 ♔xd5 40.♔f4 and the distant passed pawn must win.

38.♘f6+ ♔e7 39.♘xh5 ♔d6 40.♔f4 ♔xd5 41.♔xf5

Here the distant passed pawn is even stronger than in the previous variation, in view of the worse position of the black knight and the better position of White's king.

41...♔d6 42.♘f4 ♔e7 43.♔e5 ♘f7+ 44.♔d5 ♔f6 45.♘d3 ♔f5 46.♘c5 ♘d8 47.♔d6 ♔g4 48.♔c7 ♘c6 49.♔xb7

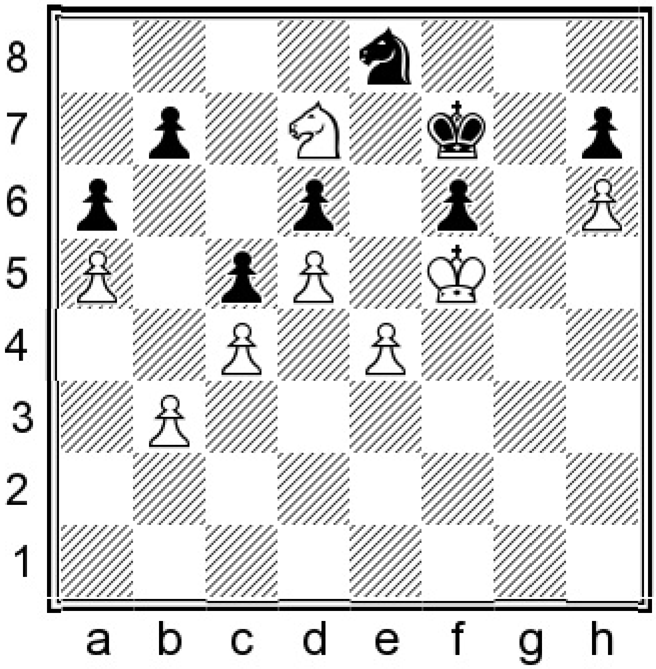
And Black resigned.

In the next example, once again, the space advantage converts the black knight into a nonentity. But it seems hard for White to strike the decisive blow.

There is only one, very brilliant solution:

Roman Hernandez Onna 2460
Zegir Sula 2390

Thessaloniki ol 1984 (9)



White to move

47.♘f8! ♔xf8

Now White is going to create a surprising zugzwang position. Black could have tried 47...♔g8, inviting a possible mistake: 48.♘xh7! (but not 48.♔e6? ♔xf8 and it is White who is in zugzwang: 49.♔d7 ♔f7 50.♔c8 ♔e7 51.♔xb7 ♔d7 52.♔xa6 ♔c7 53.♔b5 f5 54.exf5 ♘f6=) 48...♔xh7 49.♔e6 ♔xh6 50.♔e7 ♘g7 51.♔xd6+–.

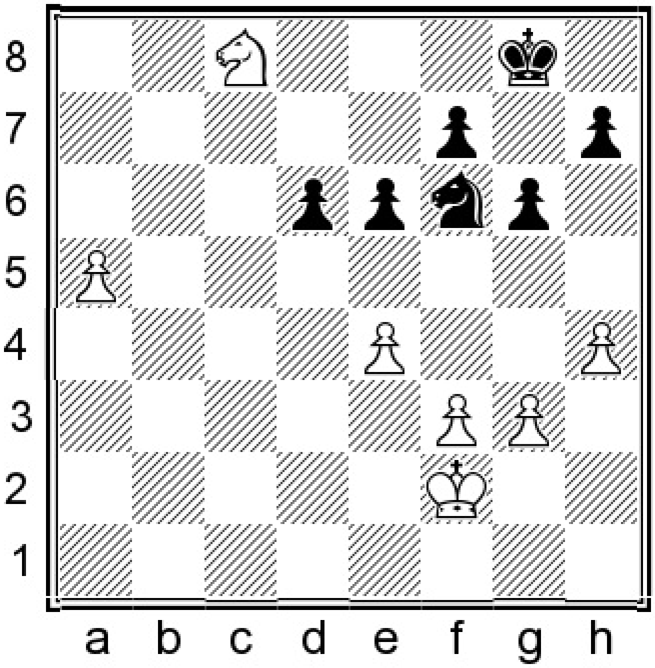
48.♔e6 ♘g7+ 49.hxg7+ ♔xg7 50.♔xd6 h5 51.♔e7 h4 52.d6 h3 53.d7 h2 54.d8=♕ h1=♕ 55.♕f8+ ♔h7 56.♕f7+ ♔h8 1-0

Pattern 62 The distant passed pawn

The distant passed pawn is possibly the most important theme in knight endings. Given the knight's short range, a very distant pawn is usually a huge advantage, and this occurs very often. It is one of the cases when Botvinnik's statement is quite true, but even in this case, compared to pawn endings the advantage is less significant. Unlike in pawn endings, and very understandably, the more distant the pawn, the greater the advantage; in other words, once again the rook's pawn is a real nuisance, the knight's pawn can be very annoying, while the bishop's pawn is usually not enough to win.

We shall begin with a very simple position, featuring Botvinnik himself. The rook's pawn easily decides the game.

Mikhail Botvinnik
Andor Lilienthal



Black to move

34...♘e8

34...♔f8?! would have allowed 35.♘xd6, although the advance of the a-pawn is equally decisive.

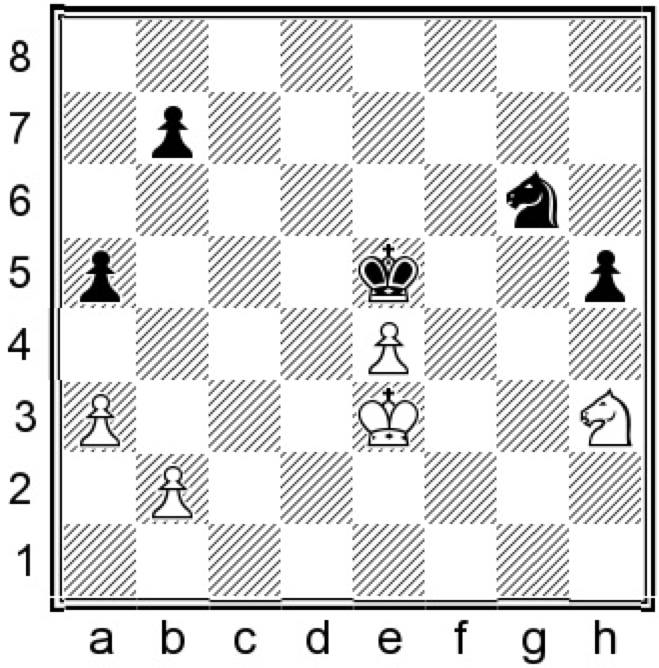
34...♘e8 35.a6 ♘c7 36.a7 ♘a8

Directed against the threat 37.♘b6.

37.♘xd6+– ♔f8 38.e5 ♔e7 39.♔e3 f6 40.♔f4 h6 41.♘c8+ ♔f7 42.♔e4 ♔g7 43.♔d4 ♘c7 44.♔c5 1-0

We shall continue with a classic example, one which has been analysed many times and is rather more complicated than it seems.

Emanuel Lasker
Aron Nimzowitsch
Zurich 1934



White to move

The pattern is very clear; almost everything is symmetrical, except for the pawns on e4 and h5. Determining whether this ending is winning for Black is very interesting, in order to draw some conclusions.

45.♘g5 ♔f6! 46.♘h7+

46.♘f3?! ♘e5! 47.♘h4 (47.♘d4?! ♘c4+; 47.♘d2 ♔g5) 47...♔g5 48.♘g2 a4! (fixing the queenside, maintaining reserve tempi and separating the pawns ready for when the enemy king invades; 48...h4? would be a mistake due to the typical 49.♘xh4!=) 49.♔d4 ♘g6 50.♔c5 ♔g4–+.

46...♔g7 47.♘g5 ♔f6 48.♘h7+ ♔e7! 49.♘g5

49.♔d4? is a natural move and an example of the dangers involved in tactical manoeuvres in knight endings. After 49...♘f8! the white knight on h7 is dominated in a different way from usual: it cannot avoid being exchanged. If 50.♘g5 ♘e6+! and the distant passed pawn (now it is a pawn ending) wins.

49...♘e5 50.♔d4 ♔d6 51.♘h3?

At the moment White is holding up the pawn with the knight, while the king prevents a queenside invasion. But it is a serious mistake.

Instead, 51.b3! h4 52.♔e3 ♔e7 53.♔d4 ♔f6 54.♘h3 seems adequate to draw.

51...a4! 52.♘f4 h4 53.♘h3 b6?

Nimzowitsch wants to put the pawn on b5 and give check on c6 when the white knight is on h3, but in fact the check could be played right away, because any excursion by the white king to the queenside would be suicidal. So 53...♘c6+! was the winning move, e.g. 54.♔c4 ♔e5 55.♔b5 ♔xe4–+.

54.♘f4 b5 55.♘h3

Here 55.♔c3, followed by b2-b3, should have drawn.

55...♘c6+ 56.♔e3?

The king opts to attend to the kingside, but this is the decisive mistake.

White should have played 56.♔c3, for the moment controlling b4, and then if 56...♔e5 he should swing towards the other wing: 57.♔d3 ♘d8 58.♔e3 ♘e6 59.♘f2 ♘c5 60.♘g4+ ♔d6 61.♘f2 ♘e6 62.♔d3 ♔c5 63.♘h3 b4 64.♘f2! (64.♘g1 ♘g5–+) 64...♘g5 65.♔e3 and now the white king heads towards the kingside and eliminates the pawn.

56...♔c5 57.♔d3

57.♔f4 also loses, e.g. 57...♔c4 58.e5 (58.♔g4 and capturing the h-pawn is very slow) 58...♔b3 59.e6 ♔xb2 and it is clear that a black pawn will queen on a1 very soon.

57...b4! 58.axb4+

If 58.♘f4 ♘e5+ 59.♔e2 b3, followed by ...♘c4 or ...♔d4.

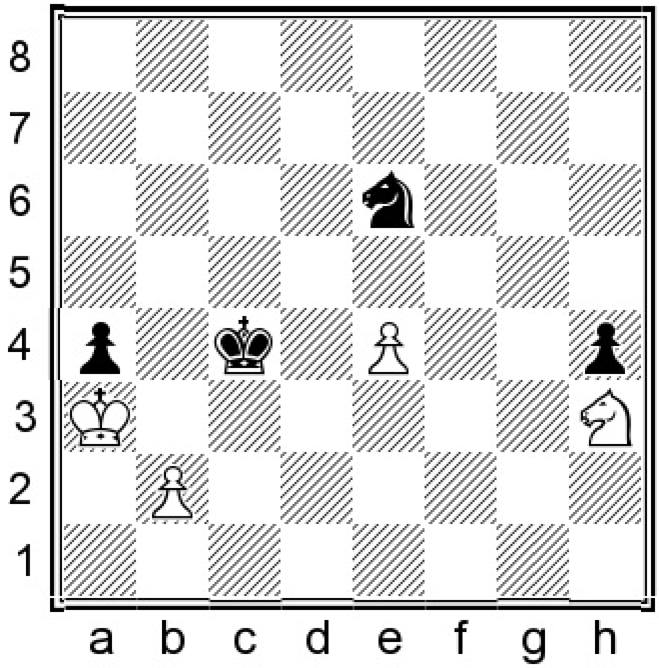
58...♔xb4 59.♔c2 ♘d4+ 60.♔b1 ♘e6!

Dominating the white knight.

61.♔a2 ♔c4!

Now the black king rushes towards the kingside and arrives just in time.

62.♔a3

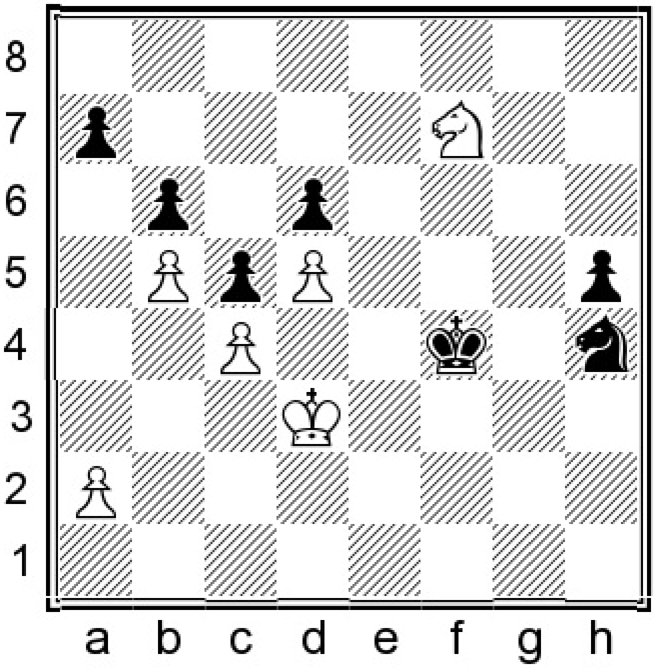


62...♔d4! 63.♔xa4 ♔xe4 64.b4 ♔f3 65.b5 ♔g2! 0-1

And Black is just in time to capture the white knight and yet still to be able to stop the b-pawn, e.g. 66.♘f4+ ♘xf4 67.b6 ♘e6 68.♔b5 ♘d8–+.

Next we have a good example of how the relative importance of some of the factors varies between pawn endings and knight endings. In pawn endings, a protected passed pawn usually defeats a distant passed pawn. In knight endings it is usually the reverse.

Grigory Serper 2540
Sergey Dolmatov 2595
Manila ol 1992 (6)

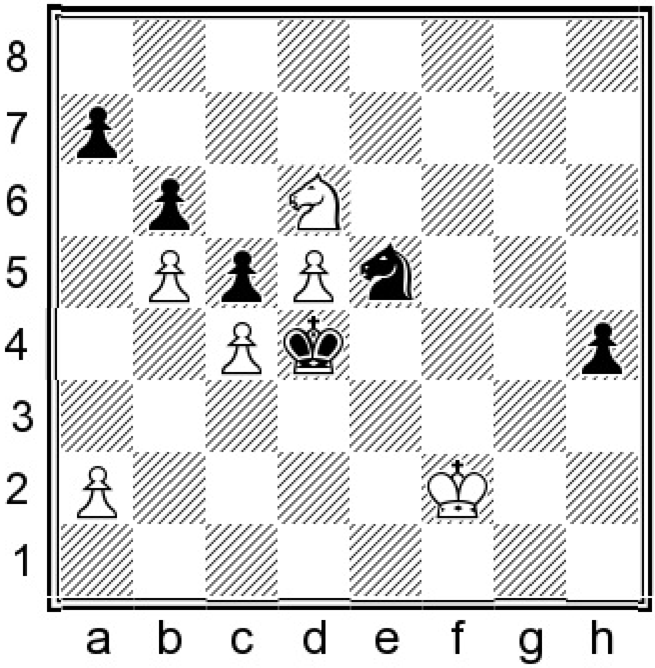


White to move

47.♘xd6 ♘g6 48.♘f7

Sending the king to stop the h-pawn with 48.♔e2!? loses, because the black king is not restricted to the square of the d-pawn: 48...♔e5 49.♘c8 ♔d4 50.d6 ♘f8! (it is not often that moving a piece to a more passive position is advantageous, but when it is a matter of a knight stopping a passed pawn, being less vulnerable to deflection sacrifices can be a big advantage; 50...♘e5? 51.♘xa7 ♔xc4 52.♘c6! ♘d7 53.a4 ♔b3 54.a5 bxa5 55.b6 ♘xb6 56.♘xa5+ with a draw, e.g. 56...♔b4 57.♘c6+ ♔b5 58.♘e5 h4 59.d7=) 51.♘xa7 ♔xc4 52.♘c6 ♔d5! (52...♔xb5 also wins) 53.a4 ♔xd6–+.

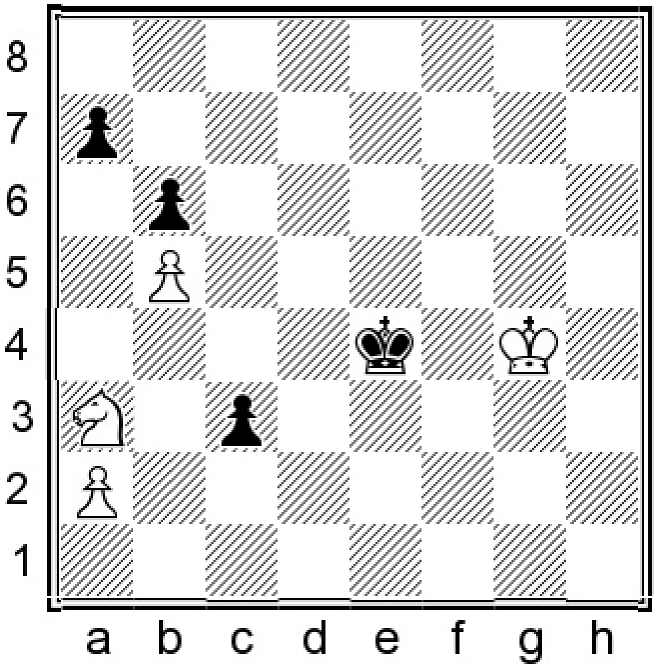
48...h4 49.♔e2 ♔e4 50.♘d6+ ♔e5 51.♘c8 ♔d4 52.♘d6 ♘e5 53.♔f2



Now Black wins brilliantly, with one of the recurring themes in knight endings – the sacrifice of the knight to win several pawns:

53...♘xc4!

53...h3! also leads to victory, using the same idea: 54.♔g3 ♘xc4 55.♘xc4 ♔xd5 56.♘a3 (here Dolmatov assessed the position as equal; it was a different world without engines) 56...c4! 57.♔xh3 c3 58.♔g4 (or 58.♔g3 ♔e4 with another bodycheck) 58...♔e4!.



analysis diagram

An excellent bodycheck, which decides the game: if 59.♔g3 ♔d3, followed by 60...c2.

54.♘xc4 ♔xd5! 55.♘d2

Or 55.♘e3+ ♔e4–+.

55...h3!

The distant passed pawn forces the king to expend a lot of time far from the events in the centre.

56.♔g3 c4 57.♔xh3 ♔d4! 58.♔g3 ♔d3! 59.♘f3 c3 60.♘e1+

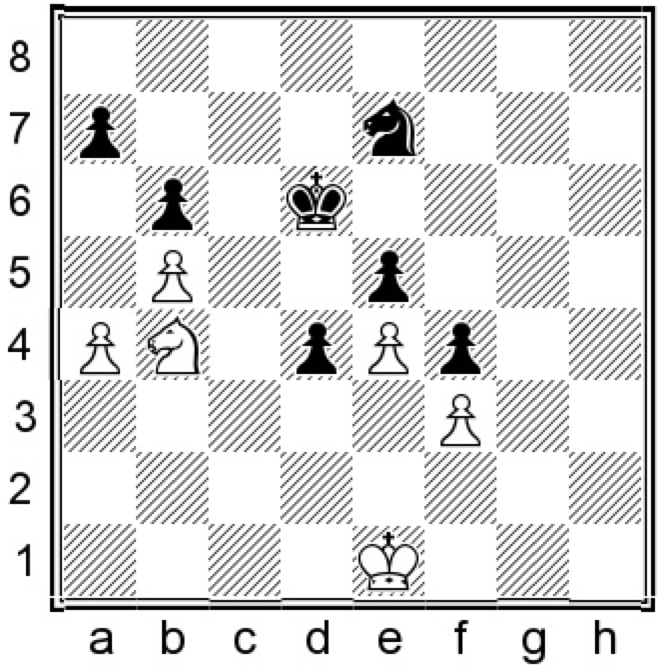
Or 60.♔f4 c2 61.♘e1+ ♔d2 62.♘xc2 ♔xc2 and the pawn ending is a win for Black: 63.♔e5 ♔b2 64.♔d6 ♔xa2 65.♔c6 ♔b3 66.♔b7 ♔b4 67.♔a6 ♔a4–+.

60...♔d2 61.♘f3+ ♔d1 0-1

Pattern 63 Protected passed pawn

After the distant passed pawn, it is interesting to continue with the protected passed pawn, because there is a kind of rivalry between them, and we are going to compare them with some judgements. The protected passed pawn is one of the patterns in which Botvinnik's dictum is not fulfilled, since in a knight ending the advantage it provides is much smaller than in a pawn ending. The reason is that a knight can blockade it without losing any of its activity, since it attacks the defending pawn.

Mikhail Botvinnik
Georgy Lisitsin
Moscow 1935 (10)



White to move

This position should be a win for Black, who is a pawn up with a protected passed pawn, but Lisitsin was unable to win it, which led to some debate about the nature of the advantage.

Black's difficulty is that he needs to invade the white camp with his king, but both possible entry routes have their problems: on the queenside, the white king can bar the way, while on the kingside, the outflanking manoeuvre required is a lengthy one and in the meantime White can create counterplay.

57.♔d2

The white king advances to bar the way.

57...♘g6

57...♔c5?! is ineffective due to 58.♘d3+ and Black must defend e5.

Notice here the way in which the knight blocks the pawn, especially suited to stopping a passed pawn which is protected by another pawn. Many of Black's difficulties in winning stem from the need to defend the e5-pawn from the attack of this knight, which is situated on the famous blockading square recommended by Nimzowitsch, right in front of the passed pawn.

58.♔d3 ♘f8

The knight aims for the e6-square, from which it can quickly attack both White's weaknesses (f3 and a4).

If 58...♔c5 59.♘a6+ and the king must retreat; or 58...♘h4 59.♔e2 ♔c5 60.♘d3+ and Black must defend the e5-pawn.

These first variations show that it is not easy for the black king to penetrate the white camp, at least not through the narrow passage (the queenside in this case).

59.♔c4 ♘e6 60.♘d3 ♘g5 61.♘e1 ♔e6 62.♔d3 ♔d6 63.♔c4 ♘h3 64.♘d3 ♘g1 65.♘e1 ♔e6

After a series of indecisive moves, Black sends his king to the other wing in order to invade via the h4-square.

66.♔d3 ♘h3 67.♔d2

Other moves will lead to similar positions, since Black can only penetrate with the king through the kingside. If 67.♘c2 ♔d6 68.♔c4 ♔d7 69.♘e1 ♘f2, followed by a king march to the kingside.

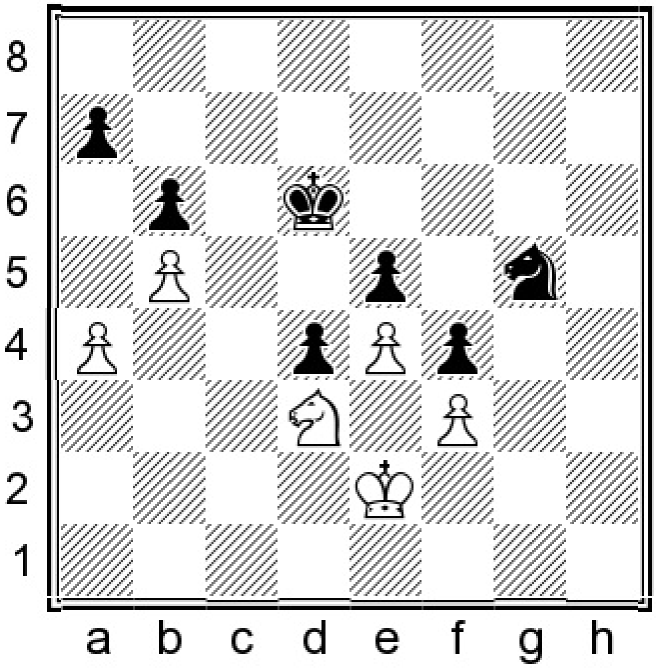
67...♔f6 68.♔d3 ♔e6

Further indecision and another retreat.

69.♔e2

69.♔c4? makes Black's task easier, because after 69...♘f2! the king cannot come back via d3 and the white knight cannot move: 70.♘g2 (70.♔b4 ♔f6 71.♔b3 ♔g5–+) 70...♘xe4!–+.

69...♔d6 70.♘d3 ♘g5



White has switched the roles of his knight and king, to prevent the danger of the black knight reaching f2, but in this new set-up the white king is much more passive.

71.♘b2?

White momentarily allows the black king to enter, an opportunity that Black fails to exploit. Instead, 71.♔f2 would have forced Black to manoeuvre in similar fashion to the game.

71...♘f7?

71...♔c5! wins fairly easily, but it requires the sacrifice of the supporting pawn on e5, which explains why both players dismissed it: 72.♘d3+ ♔c4 73.♘xe5+ ♔c3 74.♘d3 ♘e6 (semi-zugzwang) 75.♘c1 (75.♘e1 d3+! 76.♔d1 ♘c5–+) 75...♘c5 with an overwhelming advantage.

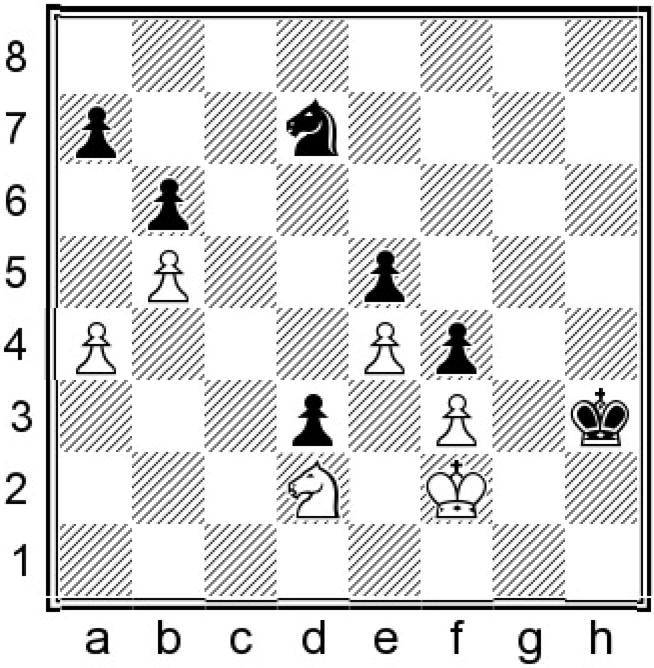
72.♘d3 ♘d8 73.♘b2 ♘b7 74.♔d1 ♘c5

Finally Black settles on a clear plan. With the knight on c5 he limits the opponent's counterplay and sends his king off on a march to invade the kingside.

75.♔c2 ♔e6 76.♔d1 ♔f6 77.♔e2 ♔g5 78.♘c4 ♘d7 79.♔f2 ♔h4 80.♔g2

The white king bars the way and to make any further progress Black is forced to advance his pawn, but this is a correct decision.

80...d3 81.♔f2 ♔h3 82.♘d2



82...♘c5?!

After numerous manoeuvres, some of which were completely unnecessary, White's pieces are completely committed and Black can make progress in various ways.

The decision to capture the a4-pawn proves inadequate. The key is to transfer the knight to the d6-square and this can be achieved by means of a strange manoeuvre, but one which is typical in play with knights: 82...♘f8! 83.♘c4 ♘g6 84.♘d2 ♘h8! 85.♘c4 ♘f7 86.♘d2 ♘d6 and now that the knight is on d6 White is in zugzwang, because if the white knight moves, Black seizes the c4-square, e.g. 87.♘b1 ♘c4–+.

83.♘c4 ♘xa4?

This is the decisive mistake. It was possible to revert to the previous plan with 83...♘d7.

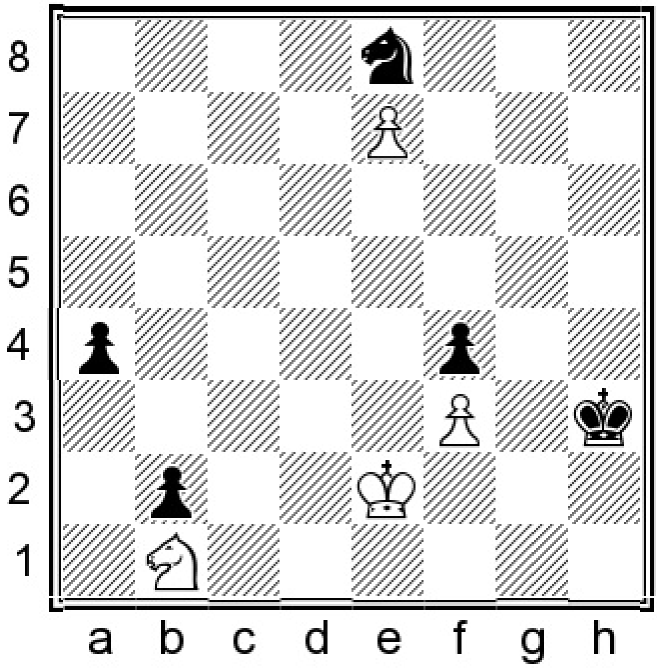
The rest of the game diverges from our theme and we give it with only short notes.

84.♘xe5 d2 85.♔e2 ♘c3+ 86.♔xd2 ♘xb5 87.♘c6 ♔g3 88.♔e2 a5 89.e5 ♘c7 90.♘d4 b5

90...a4 does not win either: 91.e6 a3 92.e7 a2 93.♘b3 ♔h4 94.♔d3 ♔g5 95.♔e4=.

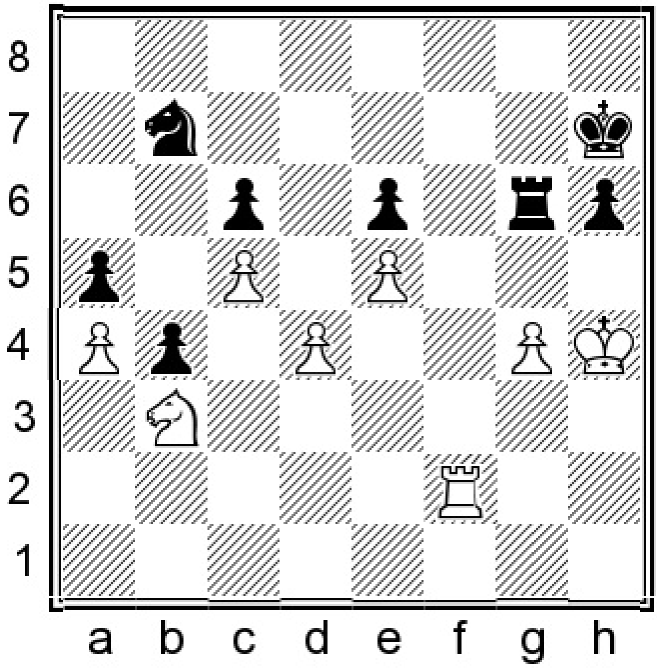
91.e6 a4 92.e7 b4 93.♘c2 b3 94.♘a3 ♘e8 95.♘c4 ♔g2 96.♘a3 ♔g3 97.♘c4 ♔g2 98.♘a3 ♔g3 99.♘c4 b2 100.♘a3 ♔h3 101.♘b1 ♔h4 102.♔d3 ♔h3 103.♔e2

It does not matter which squares the kings go to, because both knights are able to lose tempi.



103...♘c7 104.♘a3 ♔h4 105.♔d2 ♔g5 106.♔c2 ♔f6 107.♘b5 ½-½

Mikhail Botvinnik
Nikolay Novotelnov
Moscow ch-URS 1951



White to move

74.♘d2

We join the game three moves before reaching the knight ending, in time to see how Botvinnik waits to exchange rooks in more favourable circumstances.

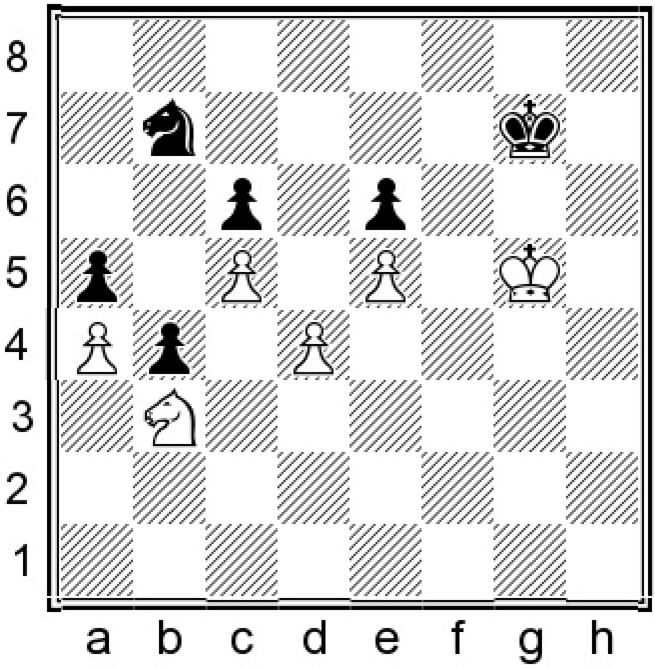
74.♖f7+ ♖g7 75.♖xg7+ ♔xg7 76.♔h5 ♔h7 77.g5 hxg5 78.♔xg5 ♔g7 would have reached the zugzwang position that Black avoids in the game, but in this case it would be White's move and a draw.

In reality, White can also win by exchanging rooks right away, because on move 77 he could make a brilliant breakthrough which would highlight the clumsiness of the knight when it is short of space and on a bad circuit: 77.d5!! exd5 (77...cxd5 78.c6 and the pawn queens) 78.e6 ♔g7 79.e7 ♔f7 80.♔xh6 ♔xe7 81.g5 and the g-pawn is now the one that queens.

74.♘d2 ♖g8 75.♖f7+ ♖g7 76.♖xg7+ ♔xg7 77.♔h5 ♔h7

The natural continuation, with which we diverge from the game, which continued 77...b3 (Black gives up the supposed pride of his position, but this merely postpones the zugzwang) 78.♘xb3 ♔h7 79.d5 exd5 80.e6 ♔g7 81.e7 ♔f7 82.♔xh6 ♔xe7 83.g5 ♘d8 84.g6 ♘e6 85.♘xa5 d4 86.♘xc6+ ♔d7 87.♘e5+ 1-0.

78.♘b3 ♔g7 79.g5 hxg5 80.♔xg5



Zugzwang. The black knight has to stay in its position and now the white king outflanks, as if it were a pawn ending, until it finally captures the e6-pawn.

80...♔f7 81.♔h6 ♔f8 82.♔g6 ♔e7 83.♔g7 ♔e8 84.♔f6 ♔d7 85.♔f7 ♘d8+

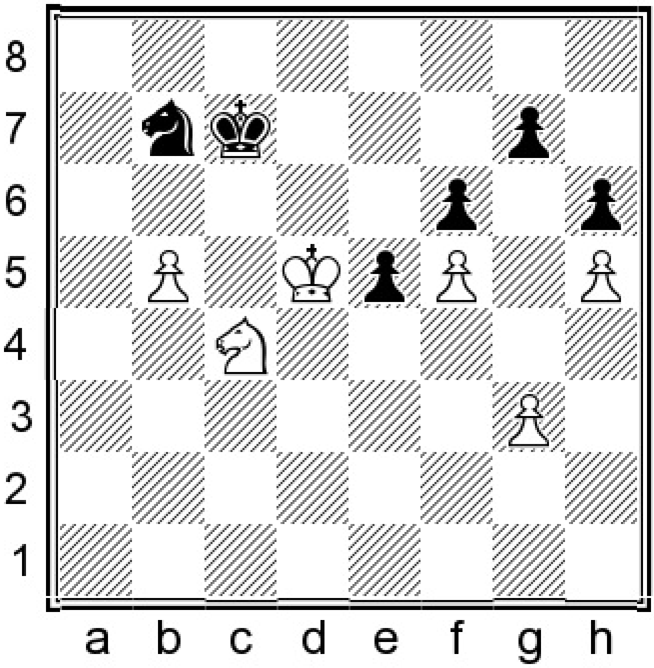
The intervention of the knight merely lengthens the process slightly.

86.♔g6 ♘b7 87.♔f6+–

We are now going to analyse some situations where one side has a protected passed pawn and the other a distant passed pawn.

The distant passed pawn usually wins, because the added value of the knight is effective in controlling a pawn in the centre, but it has many more problems with a wing pawn.

Shakhriyar Mamedyarov 2674
Vugar Gashimov 2608
Istanbul 2005 (7)



Black to move

Here, the better position of the white king finally tips the balance:

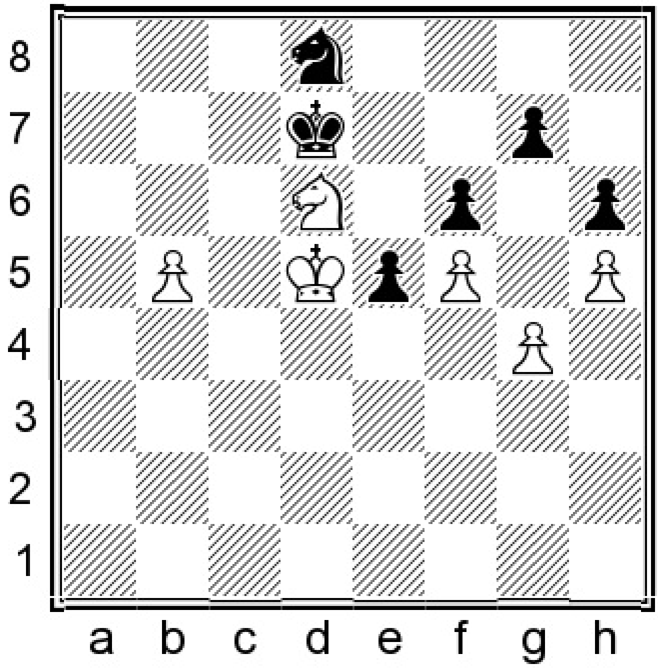
44...♔d7 45.g4!

Zugzwang, and therefore the reserve tempo that White had is decisive. Now Black has to allow one of the white pieces to enter. It is interesting to note that with the pawn slightly more distant (on the a-file), White would have no need of zugzwang, and also that the battle concludes in White's favour because he can force an entry for his king.

45...♘d8

If 45...♔d8?! then the king invades: 46.♔e6 ♔e8 47.b6 ♘d8+ 48.♔d6 e4 49.♔c7 ♔e7 50.♘e3 ♔e8 51.♘d5+–.

46.♘d6



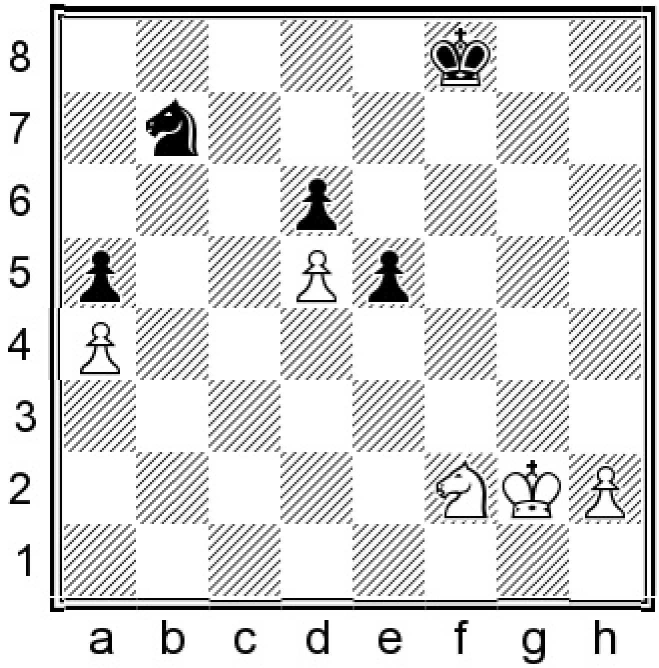
Now the black knight is dominated.

46...♔e7 47.♘e4 ♘f7

47...♘b7 48.♔c6+–; 47...♔d7 48.♘c5+ ♔c7 49.♘e6++–.

48.♔c6 ♔d8 49.b6 ♔c8 50.b7+ ♔b8 51.♘c5 ♘d8+ 52.♔b6 1-0

Gyorgy Szilagyi
Vladimir Simagin
Moscow 1960 (9)



White to move

Here we have another struggle between a protected passed pawn and a distant passed pawn. The black knight, currently threatening to go to c5, lacks decent alternative circuits, and this proves decisive:

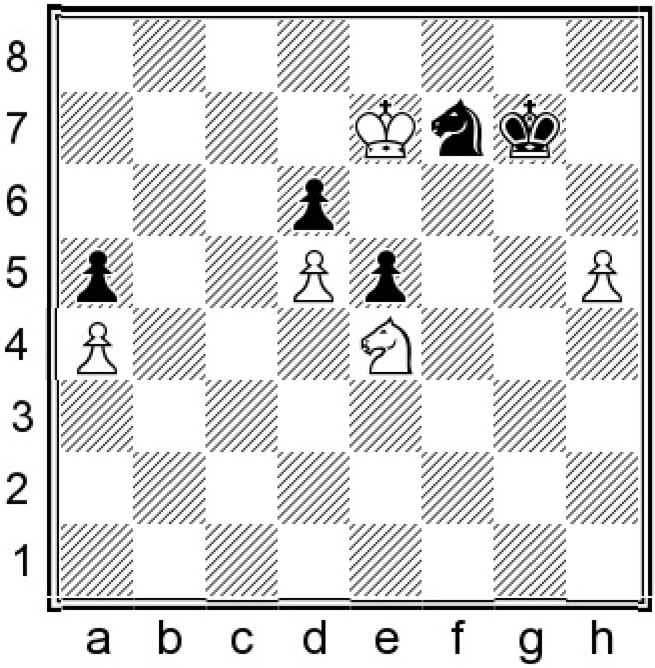
59.♘e4! ♔e7 60.♔f3 ♘d8

Or 60...♔f7 61.♔g4 ♔g6 62.h4 ♔h6 63.h5! with zugzwang. Even if it were White's move he could pass the move to his opponent by playing ♔h4.

61.♔g4 ♘f7 62.♔h5

Maintaining domination over the black knight, although other moves also win.

62...♔f8 63.♔g6 ♔g8 64.h3 ♘h8+ 65.♔f6 ♘f7 66.h4 ♔f8 67.h5 ♔g8 68.♔e6 ♔f8 69.♔f6 ♔g8 70.♔e7 ♔g7



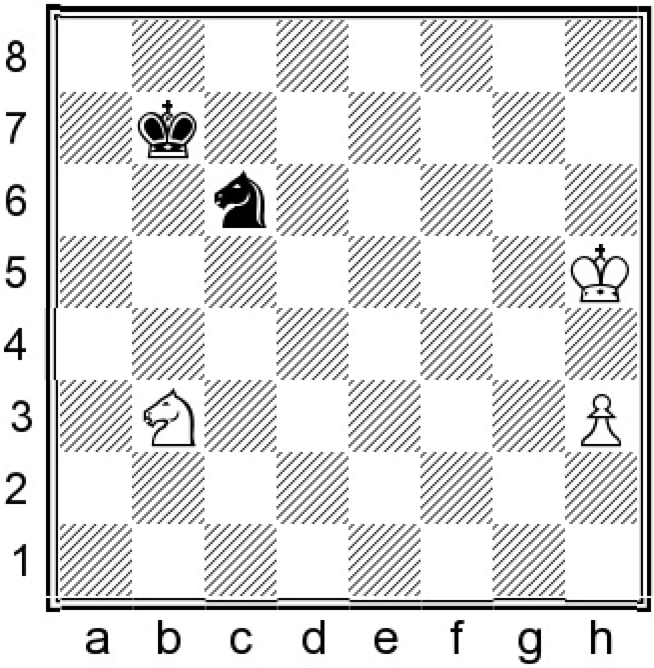
71.h6+ ♘xh6 72.♔xd6 ♘f5+ 73.♔xe5 ♘e3 74.♔d6 ♔f7 75.♔c6 ♘g4 76.♔c7 ♘e5 77.♘c5 1-0

Pattern 64 Problems with the rook's pawn

The problems the knight has with the passed rook's pawn are one of the most striking negative characteristics of this piece. We have already seen some of it in the chapters on knight vs pawns and knight vs bishop, and in this chapter we are going to look at yet another version. One of the novelties is that sometimes it is both knights that have to face those problems in a single game.

Let us begin by considering an example with a single pawn, which will reveal many clues to us.

MIkhail Podgaets
Mikhail Tal
Alma-Ata ch-URS 1968 (17)



White to move

62.♔g6

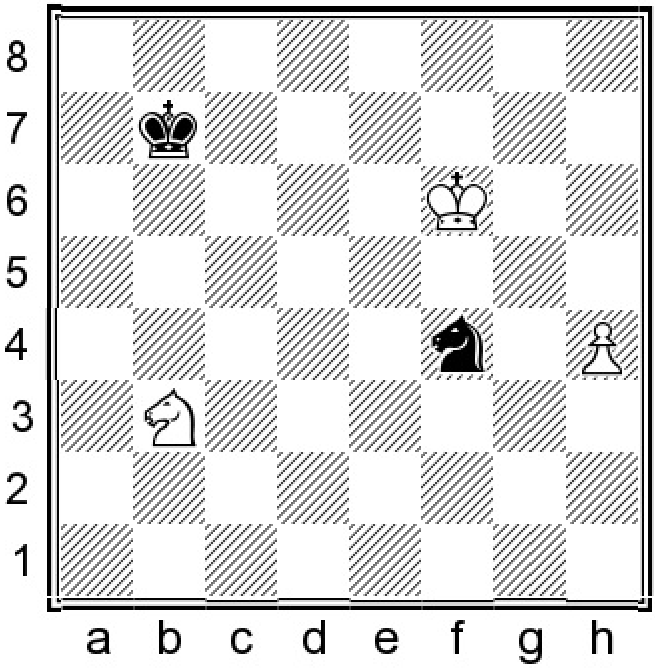
This is the logical move; it anticipates a bodycheck to the black king, although it allows the black knight to approach with check.

The importance of the black king being in the square of the pawn can be seen in the alternative line: 62.♔g5!?. Now the only way for Black to draw is to enter the square: 62...♔c7! (after 62...♘e7? only two white replies win, either immediately advancing the pawn or immediately depriving the black knight of the f5-square: 63.h4 (63.♘d4+–) 63...♔c7 64.h5 ♘g8 65.♔g6 ♔d7 66.♔g7 ♘e7 67.♘d4!; controlling the f5-square is sufficient) 63.h4 ♔d7 64.h5 ♔e7 65.h6 ♔f7 and with the black king now so close White is unable to create any real problems.

62.♔g6 ♘e5+?

Black, an extraordinary calculator and endgame player, is first to err, but this allows us to see an interesting ending. 62...♘e7+! was the only knight move to draw, the other way being to approach with the king: 63.♔f6 ♘d5+ 64.♔e5 ♘e7 (64...♘e3 65.h4 ♔c7 66.h5 ♔d7=) 65.♔e6 (65.♘d4 ♔c7!=) 65...♘g6 66.♔f6 ♘h4 67.♔g5 ♘g2=. All these variations show us that White's king and knight are unable to restrict the black knight in time to prevent the black monarch from joining in the task of stopping the pawn.

63.♔f6 ♘d3 64.h4! ♘f4



65.♘c5+?

But now it is White who lets victory slip from his grasp. And again he does so in a position where he had several winning moves, of which we shall analyse two.

If we compare the game continuation with the winning lines, we shall see that the key is that the stronger side's knight controls only one square (!) in the defensive circuit of the black knight:

A) 65.♔f5 ♘h5 66.♔g5 ♘g3 67.♘d2! (now the white knight controls the e4-square and breaks the defensive circuit) 67...♔c7 68.♔g4 (the black knight only has one square now and is situated a long way from any other effective defensive circuit) 68...♘e2 (it is worth noting that, from here, White would win even without the knight) 69.h5 ♘d4 70.h6+–;

B) 65.♘d4 ♔c8 66.♘e2 (another deflection sacrifice, although not the only winning move) 66...♘d5+ (if 66...♘xe2 67.h5 and the pawn cannot be stopped) 67.♔f7! (the white king maintains the *magic distance* and, in this case, the white knight is defending the f4-square and disrupting the circuit) 67...♔d8 and from here White would not need the knight: 68.h5+–.

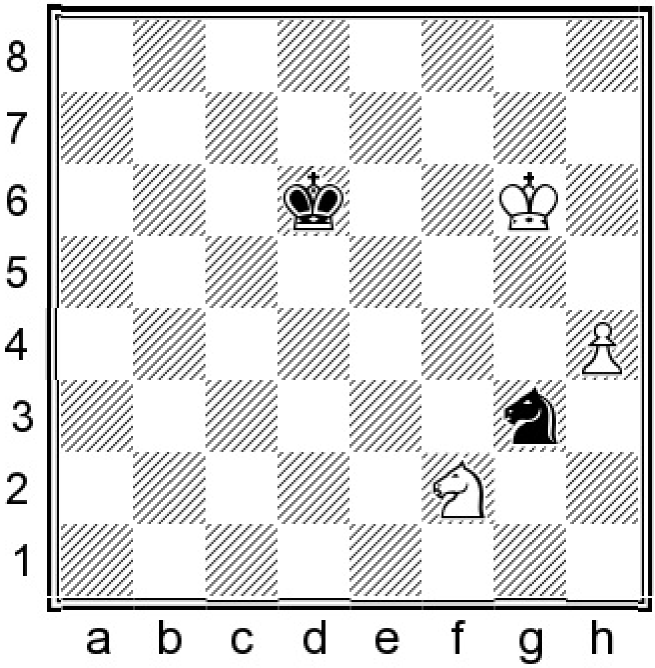
65...♔c6 66.♘d3

A deflection sacrifice, which Black can reject and which fails to disrupt the effective defensive circuit, because the black knight can set foot on g3.

66...♘h5+

Of course if 66...♘xd3?? then 67.h5 and the pawn queens.

67.♔g6 ♘g3 68.♘f2 ♔d6



The black king is already very close and it is futile for White to persist, although it allows us to see another spectacular move:

69.♘h1!?

A curious deflection sacrifice which would divert the black knight to a remote square, but it can be ignored:

69...♘e2

Not 69...♘xh1?? 70.h5+–.

70.♔f6 ♘f4 71.♘g3 ♔d7 72.♔f7

White prepares his final firework.

72...♔d6!

In the event of 72...♔d8?? 73.♘e2! it would work.

73.♘e2

A humorous touch perhaps. This time the offer cannot be refused... but it *can* be accepted!

73...♘xe2!

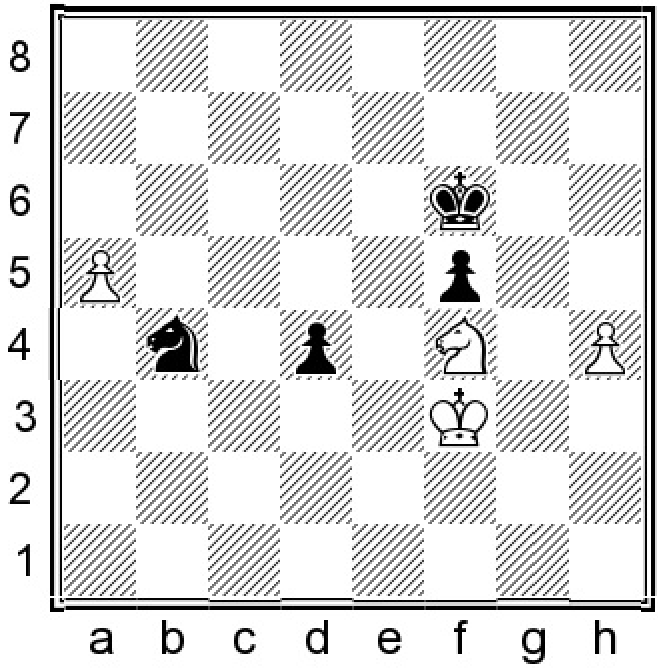
Not 73...♘h5?? 74.♔g6+–.

74.h5 ♘f4

Drawn, because if 75.h6 ♘e6 76.♔f6 ♘f8! the knight enters the correct circuit.

If a single rook’s pawn can create so many problems for the knight, then it is natural to think that two passed rook’s pawns should be an uncontrollable force. Some manoeuvres that we shall see in this ending illustrate to what extent this is true.

Sergey Dolmatov 2615
Alexander Beliavsky 2620
Odessa 1989



White to move

At the start of the ending, both knights support and defend their respective passed pawns with roadblocks. But while the white knight also blocks one of Black’s passed pawns, the black knight is tied to the a-pawn.

65.♔e2 ♔f7

The black knight is doing a good job of stopping the a-pawn. Furthermore both knights have created barriers with the help of a pawn. So the black king can do no more than wait.

65...♔e5? would have sabotaged the work of his knight: 66.♘d3+ ♘xd3 67.♔xd3+–.

66.♔d1 ♔f6 67.♔d2

Black has both his pieces in their ideal positions but he must move now, although the position cannot be considered as a real zugzwang, since White can make progress in several ways.

67...♔f7

67...♔e5? would still have been answered with 68.♘d3+.

68.♘e2

White takes advantage of the black king's momentary step backwards to eliminate one of the black pawns, although this allows counterplay that will also lead to the demise of the h-pawn.

Instead, 68.♘d3!? ♘a6 69.♔c2 ♔g6 70.♘f4+ seems to be a safer procedure.

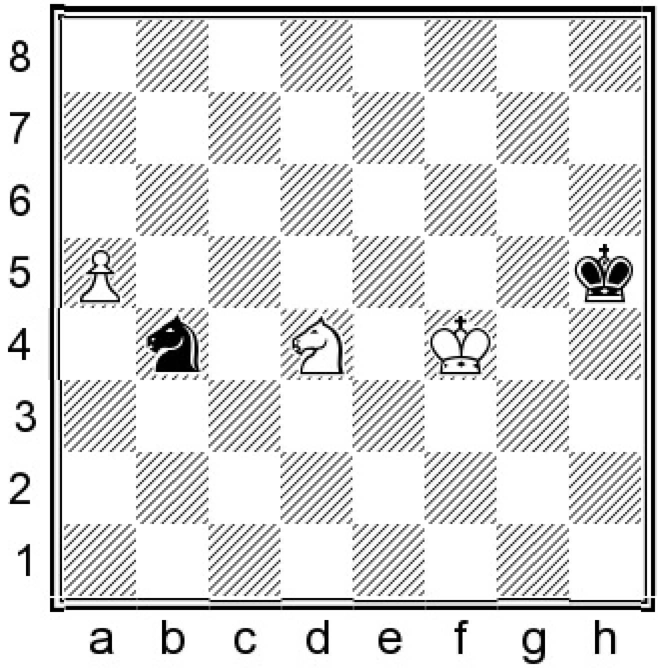
68...♔g6

Or 68...d3 69.♘f4 ♘c6 70.a6 ♘a7 71.♔xd3+–.

69.♘xd4 f4 70.♔e2!

White opts for a plan which allows the exchange of the kingside pawn, relying on the strength of his a-pawn, or perhaps on the basis of thorough calculation.

70...♔h5 71.♔f3 ♔xh4 72.♔xf4 ♔h5



White wins fairly easily now, because his knight is well prepared to deprive the black knight of a square on its circuit by an offer of exchange that will gain a tempo. However, a quick investigation of other such positions (using the Nalimov tablebases) reveals that White would win with his knight on almost any square. So this relative position of the kings is very favourable to White and the rook's pawn on the fifth rank greatly reduces the number of effective defensive circuits available to the black knight.

73.♔e5 ♔g6 74.♔d6 ♔f7 75.♔c5 ♘a6+ 76.♔b6 ♘b4 77.♘c6! ♘d5+ 78.♔b7 ♔e6 79.a6 ♔d7 80.a7 ♘c7 81.♘e5+ ♔d8 82.♘c4 ♘a8!?

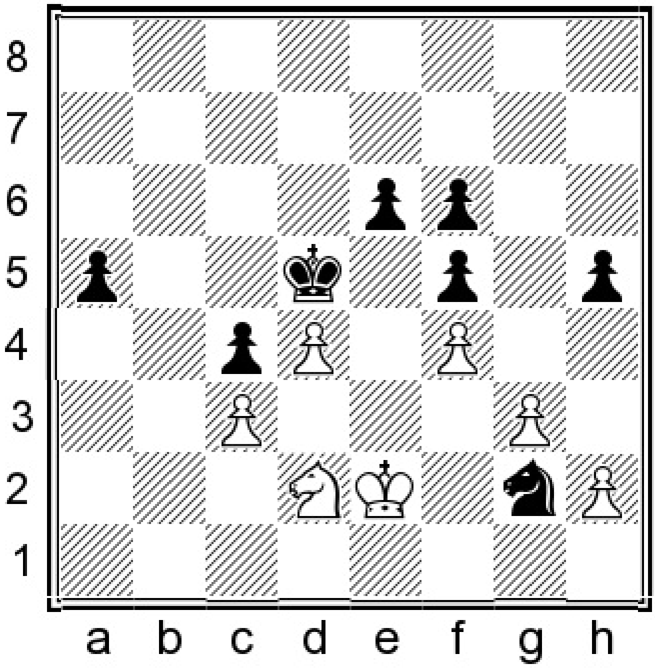
A humorous touch.

83.♘b6

Not 83.♔xa8?? ♔c8=.

83...♘c7 84.♔c6 1-0

Rolando Illa
José Raul Capablanca
Buenos Aires simul 1911



White to move

This position is from a simultaneous exhibition game in which Capablanca had squandered a big advantage. Although of no competitive interest, the game illustrates many themes relevant to the study of knight endings. In the first place Black's knight is trapped, but the passed a-pawn is perhaps more than enough compensation.

49.h4!

White understands that he cannot go after the knight, but neither does he want to allow it to be supported.

A) 49.♔f2? is the first variation in which the strength of a passed rook's pawn can be verified: 49...a4

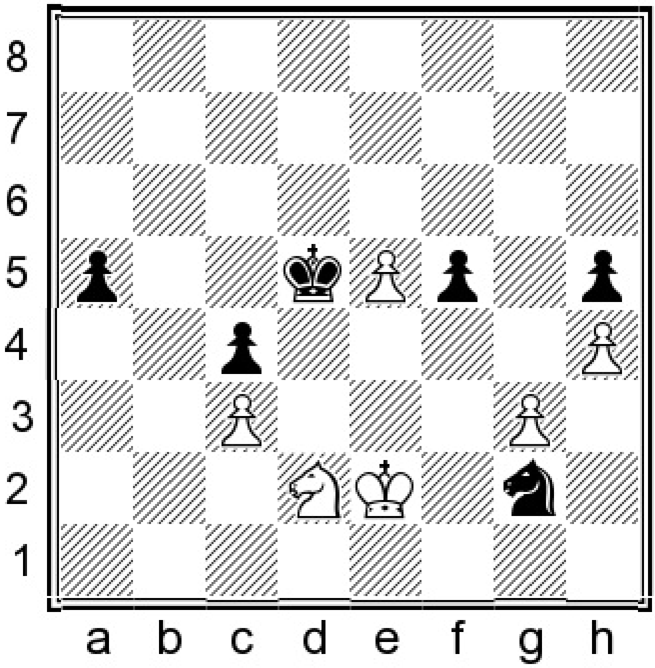
50.♘b1 ♔e4 51.♔xg2 ♔d3 and Black wins;

B) With 49.♘b1 White can also draw, from a position of stubborn resistance: 49...h4 50.♘a3 h3 51.♔f2 a4 52.♔e2!=. The position of the white knight on a3 (both blocking the a4-pawn and attacking the one on c4) and the king on e2 or f2, preventing the black king from entering and the black knight from escaping from its imprisonment, seems to ensure the draw for White.

49.h4! e5

Black plays this pawn break, his only winning chance, before the white knight can reach a3.

50.dxe5 fxe5 51.fxe5

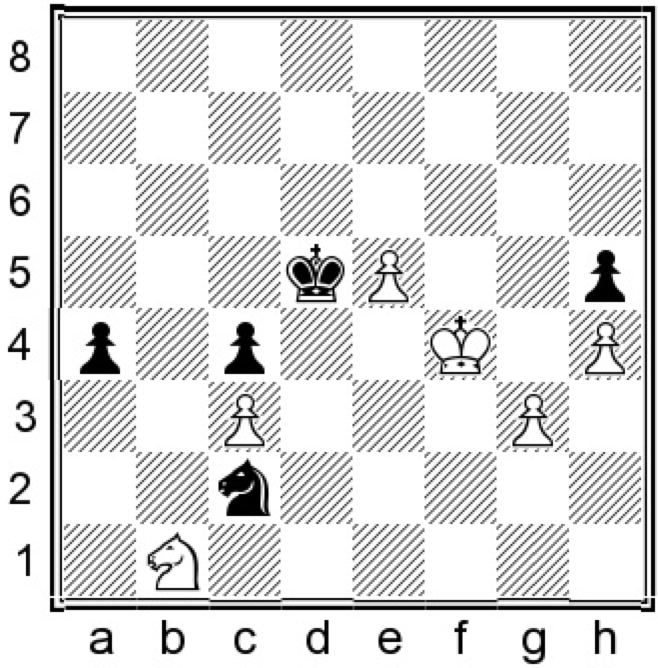


51...a4

Some unexpected variations arise in the line 51...f4!? 52.♔f3 a4:

A) After 53.e6 ♔xe6 54.♔xg2 a3 it appears that the distant passed pawn will queen, but now White can use an accelerator check, starting with 55.♘f3!, when the knight moves away but then gets back just in time, thanks to the check, e.g. 55...a2 56.♘d4+ ♔d5 57.♘c2 ♔e4 58.gxf4 ♔xf4 59.♔f2 ♔g4 60.♔e3 ♔xh4 61.♔f4 and the black king is stuck, because the knight can keep marking time indefinitely, each time Black uses up one of his pawn moves to try to evade the opposition of the white king, e.g. 61...♔h3 62.♔f3 h4 63.♘a1!;

B) 53.♘b1 ♘e1+ 54.♔xf4 ♘c2.



analysis diagram

The white knight will be lost and it seems that the c4-pawn will survive and win the game, but now after 55.g4! hxg4 56.h5 a powerful passed rook’s pawn appears in the game for the second time: 56...g3! (the only way to save the game) 57.♔xg3 ♔xe5 and now that the black king has left d5, White can take advantage of its absence to move his knight to a different blockading position and at the same time capture the pawn on c4: 58.♘d2! ♔f6 59.♘xc4=.

52.e6?

Natural but bad. White could have been more imaginative and played 52.♘xc4!, since if 52...♔xc4 53.e6 White queens first and even obtains some winning chances.

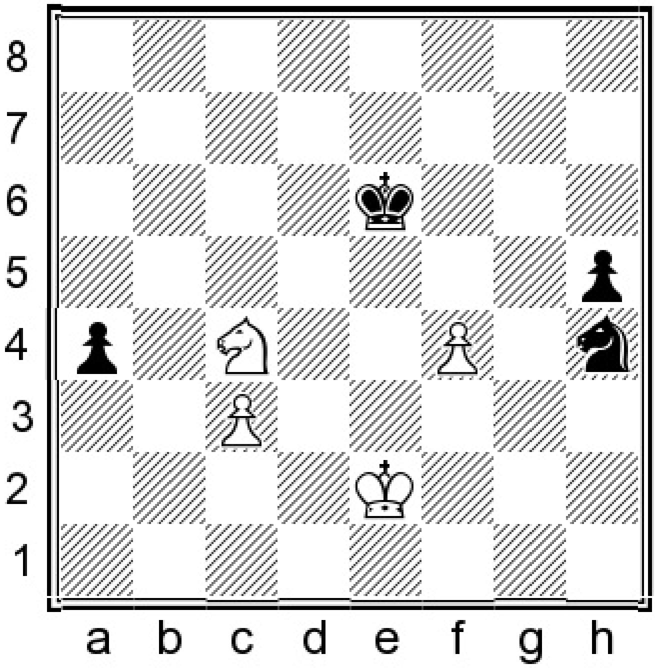
52...♔xe6 53.♘xc4 f4!

The black knight threatens to gain tempi with 54...♘e3 and will be able to escape its confinement.

54.gxf4?!

Not completely forced, although after 54.♔f3 ♘e3! 55.♘a3 ♔f5 56.gxf4 ♘d5 57.c4 ♘xf4 Black wins, thanks to having the more remote distant passed pawn and the better placed king.

54...♘xh4



A position very similar to the Dolmatov-Beliavsky game. The two rook’s pawns win.

55.♔f2 ♘f5 56.♔f3 ♘d6 57.♘a3 ♔d5 58.♔g3 ♘f5+ 59.♔f3 ♔c5

As in the previous game, both knights maintain curious barriers. Now Black hesitates a little before deciding that he needs to use the h-pawn as a distant passed pawn, in order to be able to enter with his king via e4.

60.♔g2 ♔c6 61.♔f2 ♔d5 62.♔f3 ♘d6 63.♔g3 ♘f5+ 64.♔f3 ♔c6 65.♔g2 h4 66.♔h3

Here, 66.♔f2 ♔d5 67.♔f3, using the king to guard the narrow entrance, would have forced Black to make more resolute use of his outside passed h-pawn: 67...h3 68.♔f2 ♔e4 69.♔g1 ♔xf4 70.♔h2 ♔g4–+.

66...♔d5 67.♔g4 ♔e4 68.c4 ♔d4! 0-1

A neat but simple finishing touch. The king goes after the white knight via c5 and b4.

Chapter 10
Rook endings

As was only to be expected, this will be the longest chapter in the book and for the practical player it is also the most important one. At all levels of play, rook endings are the most common, and we need to know more patterns here than in all the other types of endings.

A huge number of books have been written about rook endings, from both the theoretical and the practical point of view, but their secrets remain hidden from most players. The comment that Spielmann addressed to Rubinstein, *'Akiba, if you had lived in the Middle Ages you would have been burnt at the stake. What you do in rook endings can only be described as acts of witchcraft!'*, reveals his frustration and surprise at having been beaten from a position that he considered clearly drawn, and it reflects great empathy for the feelings of many more players throughout history. In more recent times there are some efforts by Karpov and especially Carlsen which stand out, in that they too seem like witchcraft. We are going to encounter some of them in this book, and the rest are available to the most studious seekers after improvement by investigating in the databases.

A few years ago now, Kortchnoi wrote an interesting little book in which he analysed a few rook endings in very great depth (an approach that was normal in the era of adjourned games) and he said that anyone who studied the book carefully could increase their rating by 100 points. Of course the benefit cannot be quantified, but when we think that rook endings will occur in 10% of our games, it is certain that improvement in this area will have a greater effect on our results than improvement in other endings or other areas of the game.

It should be pointed out that the theory of these endings is expanding, thanks to more precise analysis using analysis engines, and many more positions, which occur frequently despite involving three or four pawns for each player, are being studied in detail. I have tried to remain as faithful as possible to the idea of this book, which is to present positions with clear and simple patterns, without adding any theoretical investigations, but it has not been possible for me in every case. In particular, **Pattern**s **74-76** are a world that floats between theoretical and practical endings, and given the current ease of analysis, soon there will be others like this.

The status of the passed pawn

There is one theme which is connected with several of the distinctive features of the endgame and which is possibly more important or more complex in rook endings than in others. It is the differing role of passed pawns, depending on circumstances. We could refer to it as the status of the passed pawn in rook endings, and it can help us establish plans and correctly distribute tasks to the pieces.

I believe that the complexity arises from the only slight difference in strength between the pieces which take part in this ending, the king and the rook (5 points to 4, according to the most accepted theories) and from the very different abilities of each of them. While the king is very strong at close quarters and therefore becomes the ideal piece to stop or support passed pawns, the rook is stronger for capturing pawns, controlling at a distance and using checks to harass the king, the further away the better.

I propose to distinguish the following *six* situations:

1) An isolated passed pawn, supported by the rook and blocked by the enemy king.

Evaluation: the pawn is harmless and its value is almost zero.

2) A passed pawn, protected by another pawn and blocked by the enemy king.

Evaluation: The pawn cannot advance unless its king arrives to support it, but it is an advantage, as it keeps the enemy king tied up attending to it.

3) A passed pawn blocked by the enemy rook in front of it.

Evaluation: It leaves the enemy rook out of play and usually wins unless there is compensation, or the king can quickly come to its aid.

4) A passed pawn controlled by the rook from behind.

Evaluation: The pawn cannot move forward on its own. Unless its king can get close, it constitutes a slight advantage.

5) A passed pawn supported by its king (with the defending king in front of the pawn).

Evaluation: If the defending rook has plenty of lines to give check, it can only be useful to force a draw; if the defending rook cannot help with checks, it is decisive.

6) A passed pawn supported by the king (with the defending king cut off).

Evaluation: The pawn will cost the defender his rook, usually within a few moves.

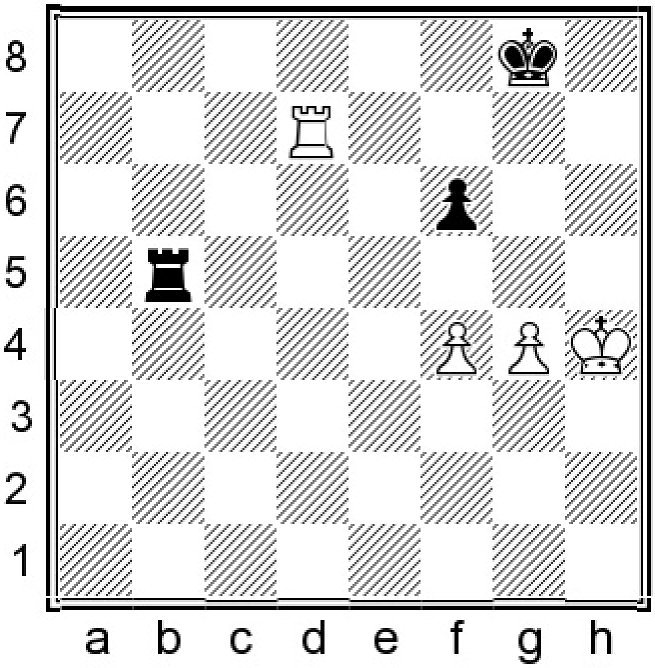
In most of the following patterns we shall see again and again how the role of the two important pieces is adapted to this evaluation of the passed pawns.

Pattern 65 The umbrella

We shall begin with three simple patterns, fundamentally tactical in nature, but very important. The *umbrella* is an enemy pawn which shelters the king from distant checks by the rook and allows it to comfortably support a passed pawn, which in other situations would be harmless.

This theme occurs frequently, and on many occasions even strong players overlook it, because the sense of materialism takes over, and a manoeuvre which consists of sacrificing a pawn remains hidden. What is more, the *umbrella* has a special power, which is that sometimes it prevents the Philidor Defence, so typical of endings of rook and pawn against rook.

Alexander Zaitsev
Robert Hübner
Büsum 1969 (11)



Black to move

White has a two to one majority on the same wing which is almost harmless. White can only win if Black ‘forgets’ the mechanism of the *umbrella*.

57...♖b1??

With 57...♖c5, waiting on the fifth rank, Black draws easily, for example 58.f5 ♖c1 and now if 59.♔h5 ♖g1! and there is no way to make progress.

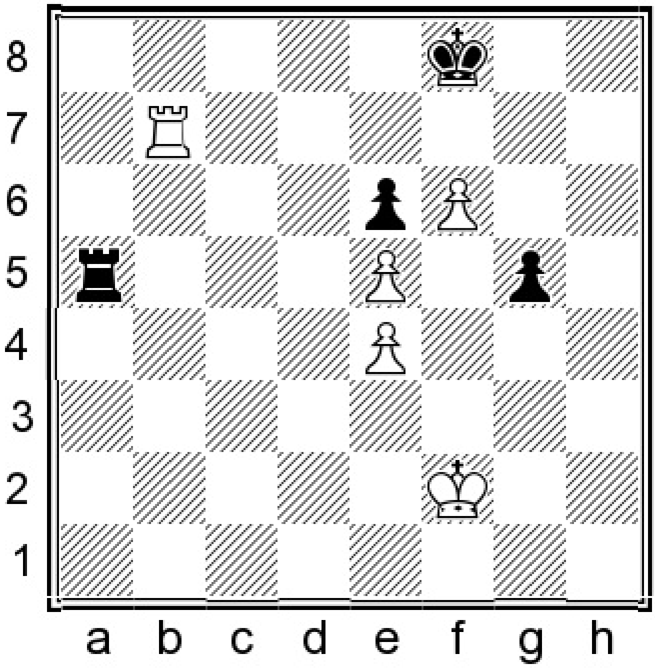
57...♖b1?? 58.♔h5 ♖g1 59.g5!

This is the typical pawn sacrifice which sets up the *umbrella.*

59...fxg5 60.f5 ♚f8 61.f6 1-0

White continues with 62.♔g6, a move that would be impossible without the pawn on g5.

Veselin Topalov 2788
Rustam Kasimdzhanov 2670
San Luis Wch 2005 (7)



White to move

This is the ending of a famous game, played in the tournament that allowed Topalov to win the World Championship.

It appears that the two white pawns on the e-file are going to be captured, and this is so, but what White needs to queen his f-pawn is the black pawn on g5.

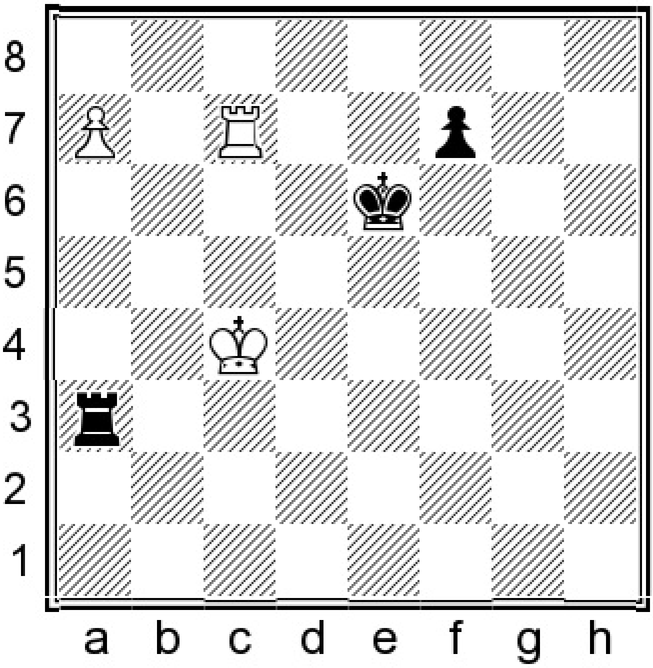
71.♔g3! ♖xe5 72.♔g4 ♖xe4+ 73.♔h5! 1-0

This position would be a draw if there were no black pawns, but here Black loses immediately, thanks to the *umbrella* effect of the black pawn on g5.

Pattern 66 The bridge

The bridge is a theme already studied in basic endgame theory; it is useful and even at times necessary, in order to promote a pawn on the seventh (See *100 Endgames You Must Know* – **Ending 53**). Now we are going to see that it also occurs in endings with more pawns. Its main usefulness is that it makes it possible to save many tempi in races between passed pawns, and it forces the opponent to exchange his rook much sooner than would be the case if the pawn had to be advanced all the way to the eighth rank. And in a few cases it is the only way of promoting the pawn.

Jesus de la Villa
Agustin Garcia Luque
Marchena 1990



Black to move

Here Black can force the draw by bringing the king closer, but in the heat of battle he made the most natural move:

59...f5?

How can this lose, when White needs many tempi to win the black rook, and by then Black will have advanced the f-pawn very close to the promotion square?

The response is that White can arrange to capture the black rook under optimal conditions, by means of repeated use of the bridge.

Instead, 59...♔d6! would have brought the king closer and forced a draw very soon.

59...f5? 60.♔b5!

This move, which was not made in the game, would have won with incredible ease. Black is unable to defend against the threat of building a bridge with ♖c6+-♖a6.

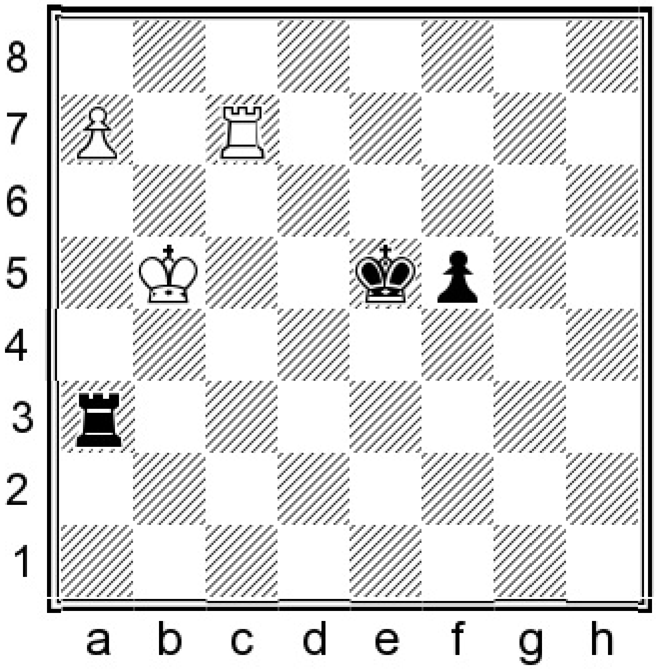
The game continued 60.♔b4? and I can recall perfectly that I made this move with the feeling that victory was an illusion. In fact, that is always the case if we fail to take advantage of our opportunities: 60...♖a1 61.♖c6+. Now I realised that I needed to try to build a bridge, but that with a modicum of care on the part of my opponent, it would be too late. (61.♔b5!? forces 61...♖b1+!, preventing the bridge: 62.♔c6 ♖a1 63.♔b7 (threatening to build a bridge with 64.♖c6+ and 65.♖b6) 63...♖xa7+ (this is satisfactory, although unnecessary) 64.♔xa7 ♔d5!= 65.♔b6 f4 66.♖f7 ♔e4 67.♔c5 f3 68.♔c4 ♔e3 69.♔c3, reaching the well-known extreme position where if the side with the pawn is to move it is a draw) 61...♔f7 (61...♔d5!? leads to a draw, but with a special resource:

62.♖c5+ ♔d4! 63.♖a5 (the bridge) 63...♖b1+! and the bodycheck triumphs over the bridge: 64.♔a3! (64.♔a4 even loses after 64...♔c4!–+) 64...♖a1+, forcing a repetition) 62.♖c7+ ♔g6 draw.

60...♔e5

A) 60...♖a1?! allows the immediate construction of the bridge: 61.♖c6+ ♔e5 62.♖a6 and White will very soon win the rook, e.g. 62...♖b1+ 63.♔c4 ♖c1+ 64.♔d3 ♖c8 65.a8=♕+–;

B) Or 60...♖b3+ 61.♔a4 ♖b1 62.♖c3, with the idea of building the bridge on a3.



61.♖c5+!

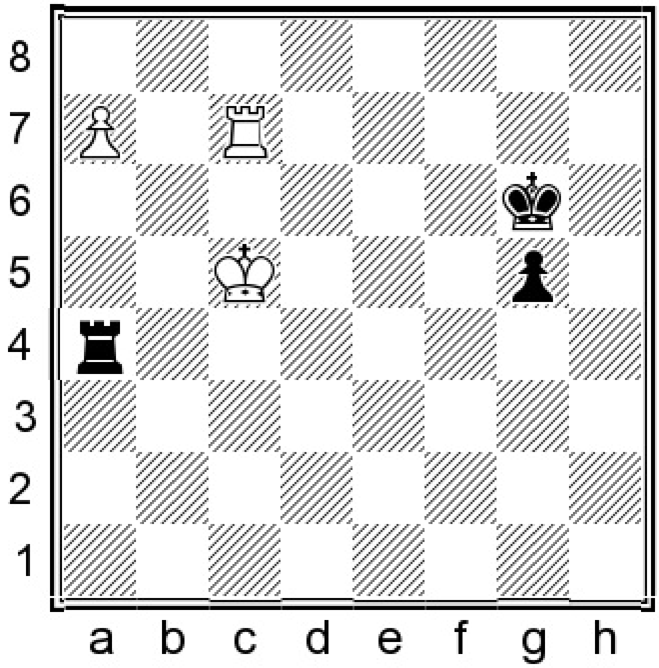
A very important resource to remember. White will build a bridge on either the fifth or the third rank and Black is helpless to prevent it.

61...♔e4

61...♔f6 62.♖c6+ ♔g5 63.♖a6+–

62.♖c4+ ♔e3 63.♖a4 ♖b3+ 64.♔c4+–

Yury Balashov
Mark Dvoretsky
USSR 1967



Black to move

A position almost identical to the one in my game after Black’s 59th move. The difference is that it is Black to play here. However, I have found other similar positions in modern databases. I have chosen to repeat this example (Balashov-Dvoretsky) to complete my personal history of learning about this pattern. This position is older than the previous one. But I did not study it until years later, when Dvoretsky’s books began to be tremendously popular. In this case it is Black to move and he can escape from the dangerous threat by moving his rook away in time:

1...♖a1!

A) 1...♔f5? 2.♔b5 ♖a1 3.♖c5++– would have led to the famous position which precedes the construction of a bridge on the third or fifth rank;

B) 1...♔h5? looks like a good way to escape this, but White can play 2.♔b6! and to Black’s great misfortune his pawn is unable to advance due to the immediate construction of a bridge on the a5-square. Despite Black’s wide choice of moves here he is unable to save the game. For instance:

B1) 2...♖b4+ 3.♔a5 ♖b1 4.♖c4+–, with a bridge on a4;

B2) 2...♔h4 3.♔b5! ♖a1 4.♖c4+!, followed by a bridge on a4;

B3) 2...♖a1 3.♖c8! (the rook is much better placed here than on c5: 3.♖c5? ♖xa7! 4.♔xa7 ♔h4 5.♔b6 g4= and the white king has been deprived of its natural highway) 3...♔h4 (3...♔g4 4.a8=♕ ♖xa8 5.♖xa8 ♔f3 6.♖f8+! ♔e3 7.♖g8 ♔f4 8.♔c5 g4 9.♔d4 ♔f3 10.♔d3+–) 4.a8=♕ ♖xa8 5.♖xa8 g4 6.♔c5 g3 7.♔d4 g2 8.♖g8+–.

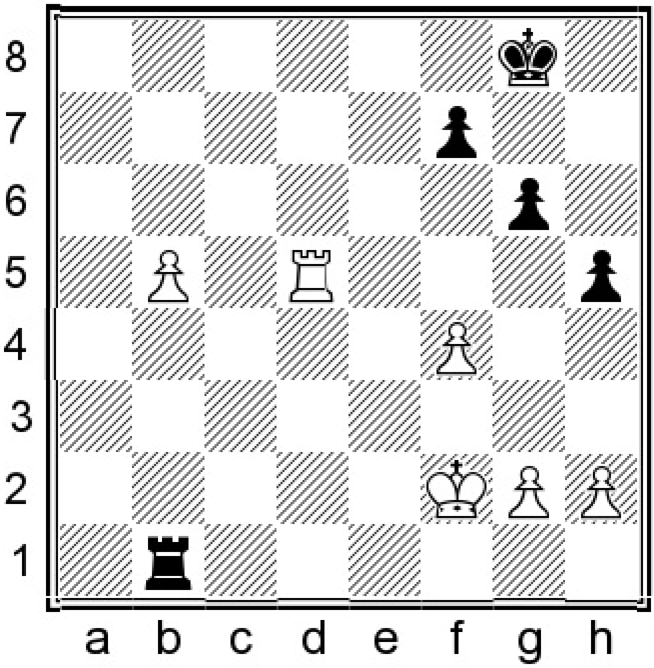
1...♖a1! 2.♔b6 ♖b1+

Thus, Black hinders both bridge-building and the plan of simply supporting promotion with ♖c8.

3.♔c6 ♖c1+ 4.♔b7 ♖b1+ 5.♔c8 ♖a1 6.♔b8 ♔f5 7.a8=♕ ♖xa8+ 8.♔xa8 g4 9.♔b7 g3 10.♔c6 ♔f4 11.♖g7 ♔f3 12.♔d5 g2=

The bridge can also arise in positions with more pawns, as long as a passed pawn can be produced. The most common case is the classic ending with an extra pawn on the queenside, which we shall study in **Pattern**s **74**, **75** and **76**.

Ulf Andersson 2545
Larry Christiansen 2490
Hastings 1978/79 (11)



White to move

This is the typical position for making use of the resource of the bridge.

White must send his king to support the passed pawn on the queenside and in the process he will lose a pawn on the other wing.

41.♔e3 ♖b2?!

41...♖b4, cutting off the king, looks more tenacious, but after 42.♔d3 ♔f8 43.♔c3 ♖b1 44.♔c4 ♔e7 45.h4 ♔e6 46.♖d3 ♔f5 47.g3 ♔g4 48.♖b3 ♖c1+ 49.♔d5 ♖c8 50.b6 ♖b8 51.♔c6 ♖c8+ 52.♔d7 ♖b8 53.♔c7 ♖e8 54.b7 ♖e7+ 55.♔d6 ♖xb7 56.♖xb7 ♔xg3 57.♖xf7 ♔xh4 58.♔e5 White wins.

42.♔d4

Andersson has it all worked out; he has seen how to accelerate the win of Black's rook.

42...♖xg2 43.b6 ♖b2 44.♔c5 ♖c2+ 45.♔b5

45.♔d6 ♖xh2 46.b7 ♖b2 47.♔c6!, with the threat of 48.♖b5, would also have won.

45...♖xh2 46.♖d4

Preparing the bridge.

46...♖e2

If 46...h4 47.b7 ♖b2+ 48.♖b4+–, constructing the bridge once again.

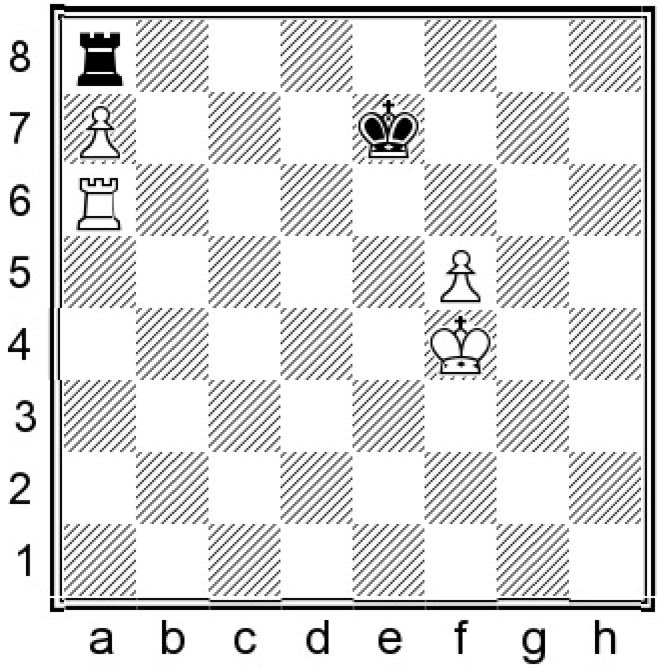
47.b7 ♖e8 48.♖c4 ♔g7 49.♖c8 ♖e1 50.b8=♕ ♖b1+ 51.♔c4 1-0

Pattern 67 Stalemate and the crazy rook

Stalemate is waiting for us at any point in an endgame, especially in games on the Internet. It is almost always the result of a blunder. But in certain positions, stalemate is typical and it is appropriate to be aware of it. In rook endings those circumstances tend to be common. Above all, there are two situations that occur often: one is usually the consequence of a certain impatience in advancing a pawn, and the other (more striking) consists in repeatedly offering to sacrifice the defending side's rook, which is usually called the *crazy rook*. But we must not be overconfident and think that by taking care of those two we shall be free from error.

First, some very short examples of a situation usually caused by impatience.

Roger Garay Murua
Rodolfo Redolfi
Cordoba 1968



White to move

Here, 75.f6+, followed by the march of the white king to the b7-square, would win easily, but White thought he saw a common trick which would help to shorten his task:

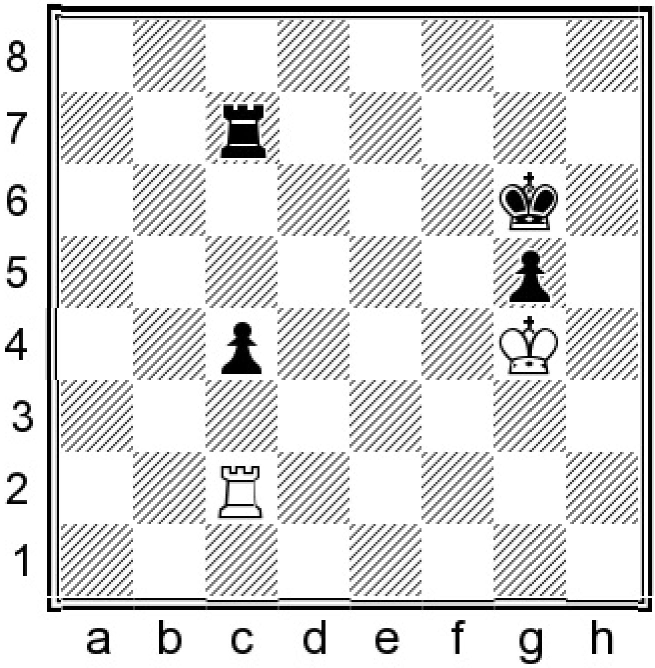
75.♖h6? ♖xa7!

With the result that it was White who got tricked:

76.♖h7+ ♔f6 77.♖xa7

Stalemate.

Goran Dizdar 2500
Alex Avshalumov 2420
Baku 1988



Black to move

Black was in a hurry here as well:

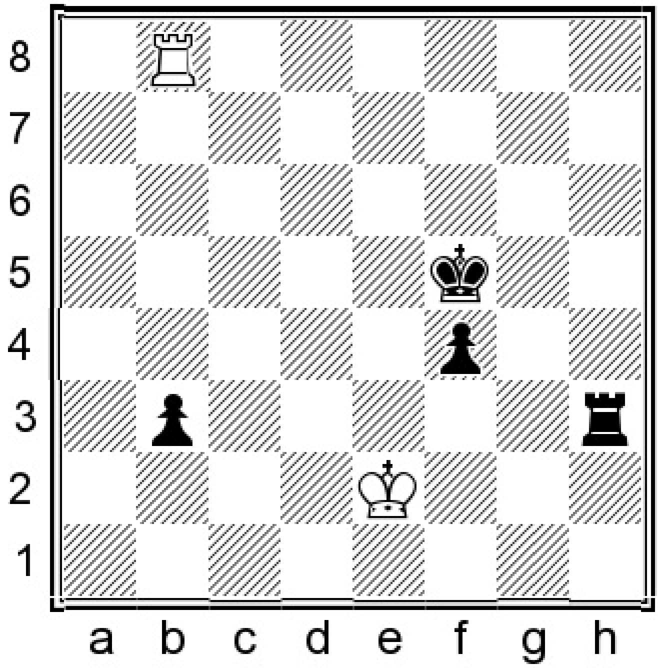
67...c3?

As before, 67...♔f6 68.♖f2+ ♔e5 and the king moves to support the most distant passed pawn.

67...c3? 68.♖xc3 ♖xc3 ½-½

Even the greatest players can sin through impatience.

Ossip Bernstein
Vasily Smyslov
Groningen 1946 (7)



Black to move

59...b2??

Among other things, 59...♔e4 would have won, e.g. 60.♖b4+ ♔d5 61.♖xf4 ♖h1 62.♖b4 b2–+.

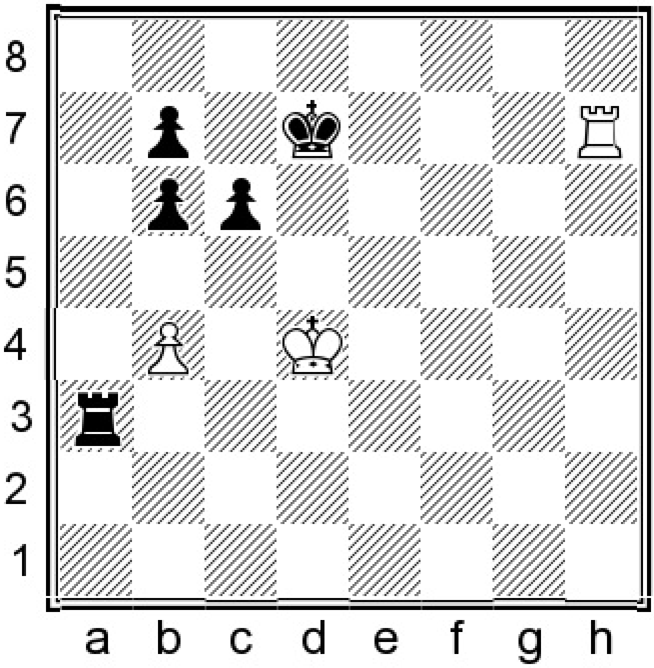
59...b2?? 60.♖xb2! ♔g4

Black declines the rook (60...♖h2+ 61.♔f3 ♖xb2 would be stalemate) but the damage is done.

61.♔f1 ½-½

The stalemate theme does not always arise due to an oversight. Sometimes it is a correct and necessary resource. But it could almost always have been prevented earlier.

Paul Motwani 2355
Julio Granda Zuñiga 2475
Thessaloniki ol 1988 (7)



Black to move

In this position it seems that White will soon lose the b4-pawn and the game, but he has a solution.

48...♔d6?

Black was in a hurry and had discovered a variation which would win the pawn on b4. Instead, 48...♔c8! would have won uneventfully, but would have taken longer. Now White discovers an opportunity, which he must have calculated at this point in order to be able to make the decision to capture the pawn on b7:

48...♔d6? 49.♖xb7! b5 50.♖h7 ♖b3

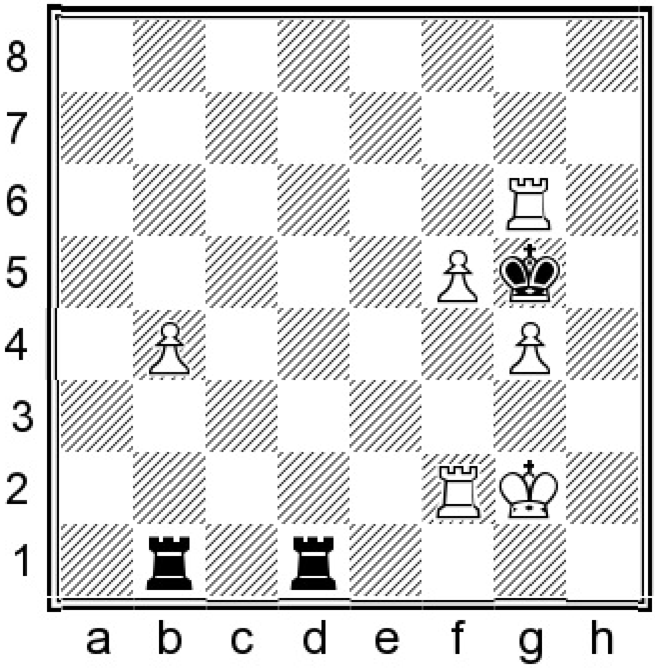
The pawn seems defenceless.

51.♖h6+! ♔c7 52.♖h4! ♖xb4+ 53.♔c5

And Black cannot capture the rook due to stalemate. The position is a draw.

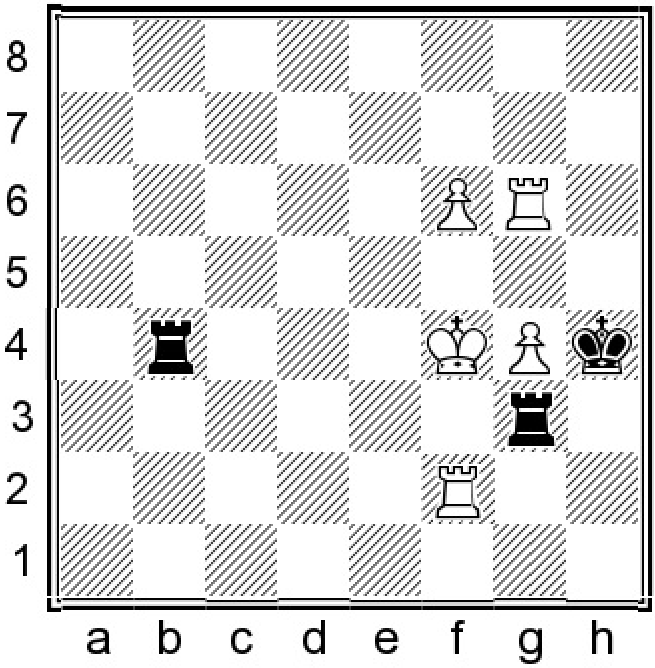
But there can be few examples which are more striking and more characteristic of rook endings then the popular *crazy rook*.

Ron Henley 2525
Jay Bonin 2330
New York 1983 (7)



Black to move

40...♔h4 41.f6 ♖g1+ 42.♔f3 ♖g3+ 43.♔f4 ♖xb4+



Everything is going well, the checks are coming to an end.

44.♔f5?

44.♔e5 would have ended the checks, but it would have taken a few more moves. Once again, impatience.

44...♖f3+!!

Black sacrifices the first rook in such a way that its capture is forced.

45.♖xf3 ♖b5+ 46.♔e6 ♖e5+!

And now the second one is transformed into a *crazy rook*, one that repeatedly offers itself, pursuing the enemy king wherever it goes, because if it is captured the game ends in stalemate.

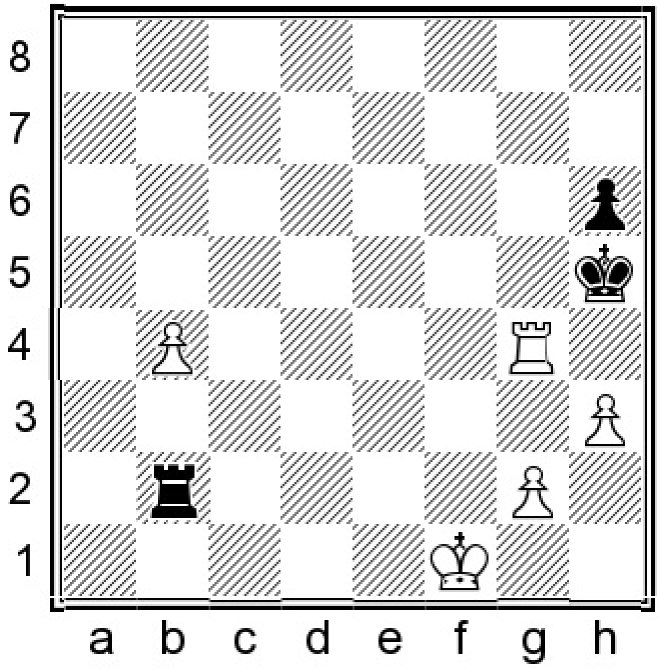
47.♔f7 ♖e7+ 48.♔g8 ♖g7+

Incredible nerve.

49.♔h8 ♖g8+ 50.♔h7 ♖g7+ 51.fxg7 ½-½

To prevent the annoyance of being assailed by a *crazy rook*, it is always useful to pay attention to a very clear sign: the enemy king's lack of squares.

Thezlo Ondok 2175
Ioan Mihut
Hungary tt 1997



White to move

The black king has no moves. Careful!

54.♔e1?

He should have played 54.♖e4, for example, although there would still have been work to do.

54.♔e1? ♖e2+!

The *crazy rook* runs riot.

55.♔f1 ♖f2+ 56.♔g1 ♖f1+! 57.♔h2 ♖h1+ 58.♔g3 ♖xh3+ 59.♔f4 ♖f3+ 60.♔e5 ♖f5+ 61.♔xf5

Draw.

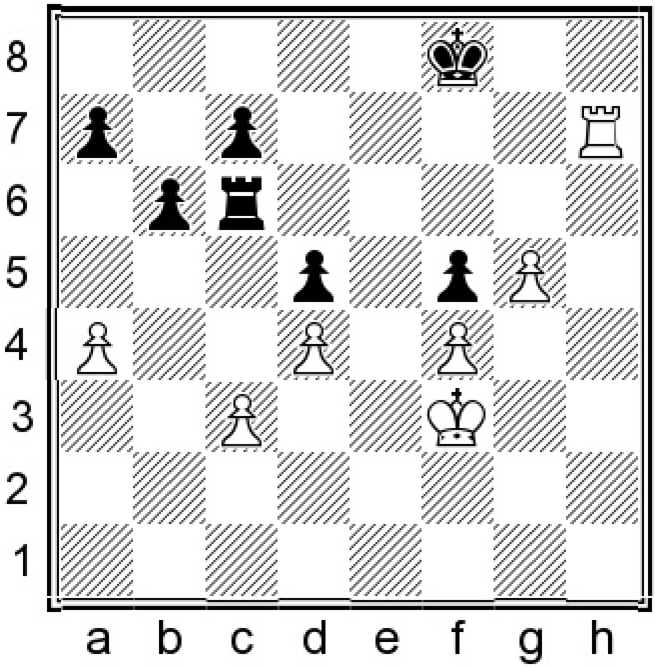
Pattern 68 The king supports the passed pawn

In the next three sections we are going to look at different circumstances relating to the role of the king in rook endings, both in its positive and negative aspects. The common factor is the idea that the king should take up the most active position possible, escape from restricted positions, and take part in the struggle of the passed pawns, either by supporting them or by blocking them.

As we have already mentioned in the introduction to this chapter, with reference to *the status of the passed pawn*, the difference in value of passed pawns can be dramatic. A passed pawn is much stronger when supported by its king and even when opposed by the defender's king it can become decisive if there are other pawns (of either colour) present, making the defence by means of distant checks by the rook more difficult.

We cannot do better than begin with the classic ending on this theme, even though it is very well known.

José Raul Capablanca
Savielly Tartakower
New York 1924 (6)



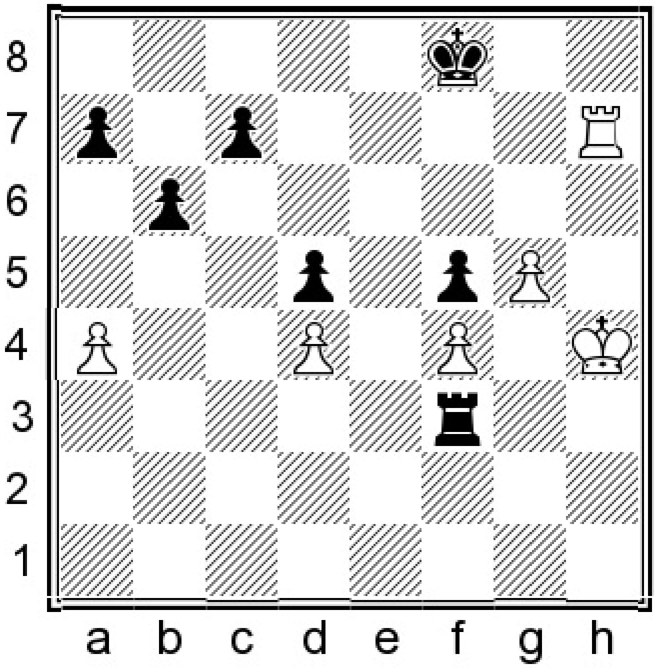
White to move

I can still recall the impression this endgame made on me when I saw it for the first time. It even looks as though Black is better with his very active rook, which is about to capture a pawn. The manoeuvre of the white king, which succeeds in coordinating with his passed pawn and rook, proves to be more important than the deficit of pawns arising.

35.♔g3! ♖xc3+

The alternative 35...a6!? is also interesting here, with the same plan as a move later.

36.♔h4 ♖f3?!



This is the most natural continuation, but it loses, and in a way that now seems trivial to us. But otherwise White gains two connected passed pawns which seem to win easily:

A) After 36...♖c1?! the rook fails to arrive in time: 37.♔h5 ♖h1+ 38.♔g6+–;

B) 36...c5?! logically seeks counterplay, but is also too slow: 37.dxc5 bxc5 38.g6 d4 39.♔g5 d3 40.♔f6+–;

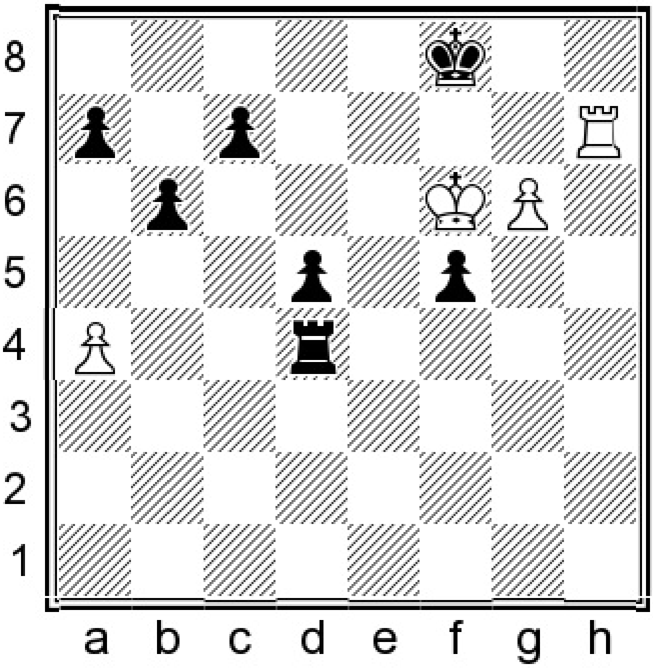
C) 36...a6!? on the other hand, is very interesting. It took many years before this plan was analysed. The idea is typical of modern chess; Black seeks counterplay and so creates a passed pawn on the queenside. But the essential element of this plan for Black is that his rook remains available to give check along Black's third rank, which means that the arrival of the white king on f6 is not as dangerous. Nevertheless, White can win with 37.♔h5! (the move played in the game, 37.g6, does not work here since it allows Black's whole idea to be revealed: 37...b5 38.axb5 axb5 39.♔g5 b4 40.♔f6 ♖c6+ and this check disrupts White's winning mechanism) 37...b5 38.♔g6! and now 38...bxa4 (or 38...b4 39.♖h8+ ♔e7 40.♔xf5 b3 41.♖b8+–; or 38...♖c6+ 39.♔xf5 bxa4 40.♖h3 and the two connected pawns should win) 39.♖d7 (perhaps a difficult move, since the objective is to deploy the rook behind the a4-pawn, but other moves also win) 39...a3 40.♖xd5 ♖c6+ 41.♔h7!. The white king has completed a brilliant journey and is now ideally situated to support the g-pawn to the end of the board.

37.g6!

White offers another two pawns. In reality, by now this could not be avoided, but the visual impact remains tremendous.

37...♖xf4+ 38.♔g5 ♖e4

The third pawn cannot be captured: 38...♖xd4 39.♔f6!



analysis diagram

and White's idea has been crowned with total success. The king supports the pawn and there is no way for Black to prevent its rapid promotion other than to give up his rook for it: 39...♚e8 40.♖xc7 ♖g4 41.g7 d4 42.♖c8+ ♔d7 43.g8=♕ ♖xg8 44.♖xg8 ♔d6 45.♔xf5, and the black pawns are not dangerous.

39.♔f6 ♔g8 40.♖g7+ ♔h8 41.♖xc7

The formidable strength of the rook on the seventh, the king and the passed pawn forces Black into total passivity.

41...♖e8 42.♔xf5

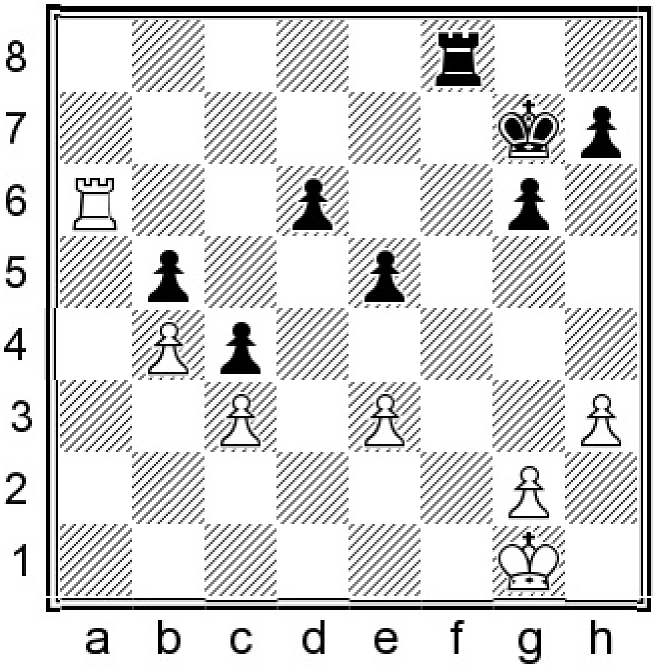
White now wins prosaically as the position no longer requires any finesses. 42.♔f7! was the consistent way to implement the plan of collaboration between the rook, the king and the passed pawn right to the end: 42...♖d8 43.♖c1 ♖d7+ 44.♔f8 ♖d8+ 45.♔e7 ♖b8 46.♔f7 ♖b7+ 47.♔f6 ♖b8 48.♖h1+ ♔g8 49.g7+–.

42...♖e4 43.♔f6 ♖f4+ 44.♔e5 ♖g4 45.g7+!

And making use of the circumstance that the pawn ending is winning, White advances his pawn to the seventh and continues to condemn the black king to total passivity.

45...♔g8 46.♖xa7 ♖g1 47.♔xd5 ♖c1 48.♔d6 ♖c2 49.d5 ♖c1 50.♖c7 ♖a1 51.♔c6 ♖xa4 52.d6 1-0

Marcelino Sion Castro 2380
Alexander Beliavsky 2650
Leon 1994 (5)



Black to move

This position arose in a game that I saw live and was commenting on with some other players. Despite having studied the Capablanca-Tartakower position we were unable to find the winning plan for Black. Once again it seems that White has a lot of counterplay and is going to be able to draw, but once again the solution for Black is to sacrifice several pawns in order to support his passed pawn. But which passed pawn? Answer: the one on c3!

43...♔f6!

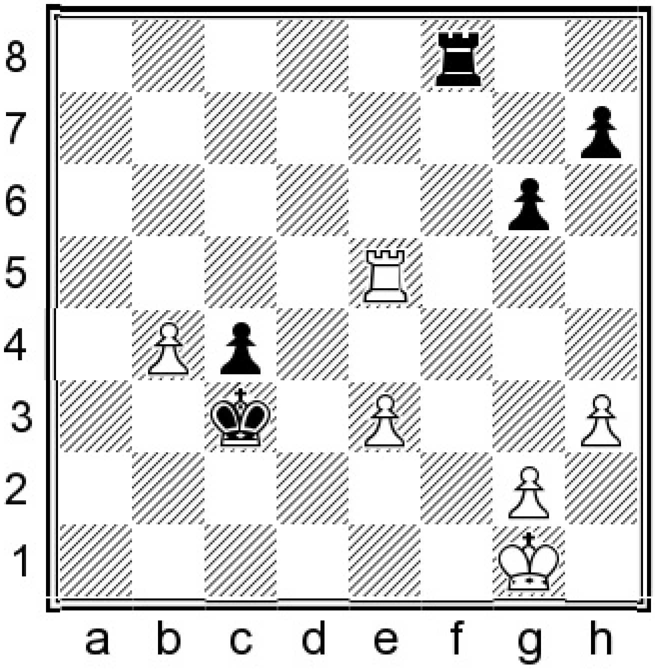
After this tremendous move, everything is clear. White can restore material equality, even win a pawn, but the black king descends upon the white pawn chain and does all the work: first it creates a passed pawn and then it supports it all the way to promotion. 43...♖d8?! 44.♖b6

or 43...d5 44.♖d6! d4 45.exd4 exd4 46.♖xd4 cannot win.

43...♔f6! 44.e4

This is one of several attempts, each with different plans. In this case, White blocks the black king's path.

A) 44.♖xd6+ is what we might call the collaborative option. White captures everything he can: 44...♔f5! 45.♖d5 (after 45.♔f2 ♔e4+ 46.♔e2 ♖a8! 47.♖d2 ♖a3 48.♖c2 g5 White is completely passive and losing) 45...♔e4 46.♖xb5 ♔d3! (46...♔xe3 was also winning, but after 47.♖d5! the passed pawn is less dangerous, although Black should still win) 47.♖xe5 (compared with the initial position, Black has lost three pawns, but now his king, finally, creates a passed pawn and supports it to the eight rank) 47...♔xc3+–



analysis diagram

and now the c-pawn, supported by its king, will very soon cost Black the rook: 48.b5 ♔b3 49.b6 c3 50.b7 c2 51.♖c5 ♖b8 52.♔f2 ♖xb7 53.♔e2 ♔b2, followed by 54...c1=♕;

B) The other option is to activate the king: 44.♔f2 ♔g5+! 45.♔e2 ♖f6 46.♖b6 ♔h4 47.♖xb5 ♔g3–+ and in this case the king descends upon the kingside pawns.

44...♔e6?!

The contrast between this and the previous move is curious. The previous move was strong and imaginative; this one is weak and timid. Probably the difference is that now Black has a guaranteed advantage. Instead, 44...♔g5! would have been consistent with the plan initiated with 43...♔f6 and is a stronger move, e.g. 45.♖a2!? (preventing 45...♔f4; 45.g3 ♖f3!; 45.♖xd6 ♔f4 46.♖d5 ♔xe4 47.♖xb5 ♔d3! 48.♖xe5 ♔xc3–+ as in the variation in the previous note) 45...h5! (zugzwang) 46.♖d2 (46.♔h2 ♖f1!) 46...♖a8 47.♔f2 ♖a3–+.

45.♖a5 ♖f4 46.♖xb5 ♖xe4 47.♔f2 ♖f4+ 48.♔e2 ♖f8 49.♖a5 h5 50.♖a7 ♔d5 51.♖a6?!

51.♖g7 is the most logical move, trying to make the black rook passive, but the solution is 51...♔e4! (not 51...♖f6?! 52.♖c7! g5 53.b5 and the b-pawn will reach the seventh rank) 52.♖xg6 d5, followed by ...d5-d4.

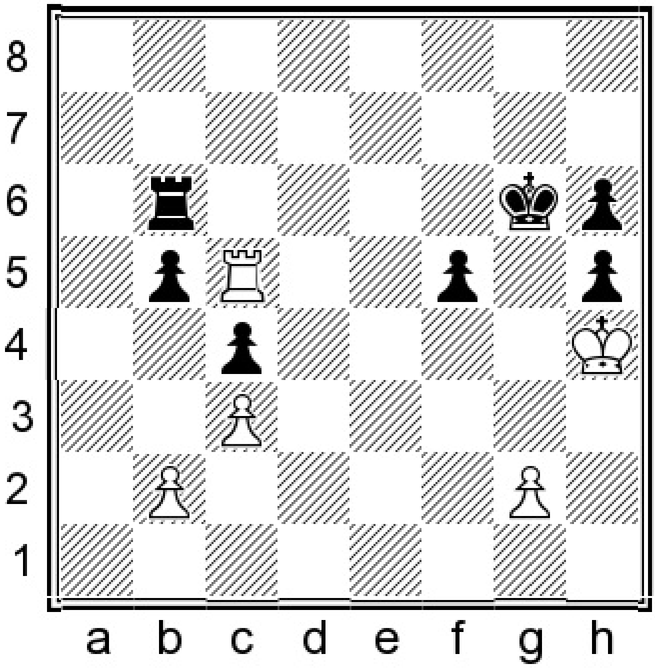
51...g5 52.♖a7 ♔e4 53.♖g7 d5 54.♖xg5 d4 55.cxd4 exd4–+

The two connected passed pawns are irresistible.

56.♖xh5 d3+ 57.♔e1 c3 0-1

As a final touch to this theme, here is a game which was of great importance in a World Championship match and is of exceptional profundity.

Viswanathan Anand 2775
Magnus Carlsen 2870
Chennai WCh 2013 (m/6)



Black to move

In this game, Anand had played the rook ending very accurately, keeping his rook active and with the better structure in exchange for the two pawns. At this moment all the live commentators, including myself, were prophesying that the game was going to soon finish in a draw. The engines think likewise. But the reality is that the scenario is prepared for a manoeuvre of even greater profundity than the one in the game Capablanca-Tartakower:

48...♖e6!!

I think in a book of practical endings awarding two exclamation marks does not make much sense, but this move is absolutely extraordinary and few (if any) understood it when it was made on the board. Most of us were thinking that it was one of the manifestations of Carlsen's tenacity, with the sole intention of making Anand suffer a little bit longer, but with no real hopes of winning. However, move 58, 10 moves further on, will show us the profundity of Black's idea. Probably Carlsen did not see all the concrete variations, since there are many similar options, but he definitely saw the outlines of the idea: Black will sacrifice *three* pawns! These will include the two which seem most healthy, sacrificed to create a new passed pawn, but one supported by his king. The idea is not sufficient to win against correct play, but it is evident that it creates enough practical problems for a world champion to go astray.

49.♖xb5 ♖e4+ 50.♔h3 ♔g5 51.♖b8?!

It cannot be said that this move is a mistake, but if Anand could have imagined what was awaiting him he would perhaps have decided to force simplification with 51.b3! ♖e3+ 52.♔h2 ♖xc3 53.bxc4 ♖xc4, leading to an ending which has occurred many times and should finish in a draw.

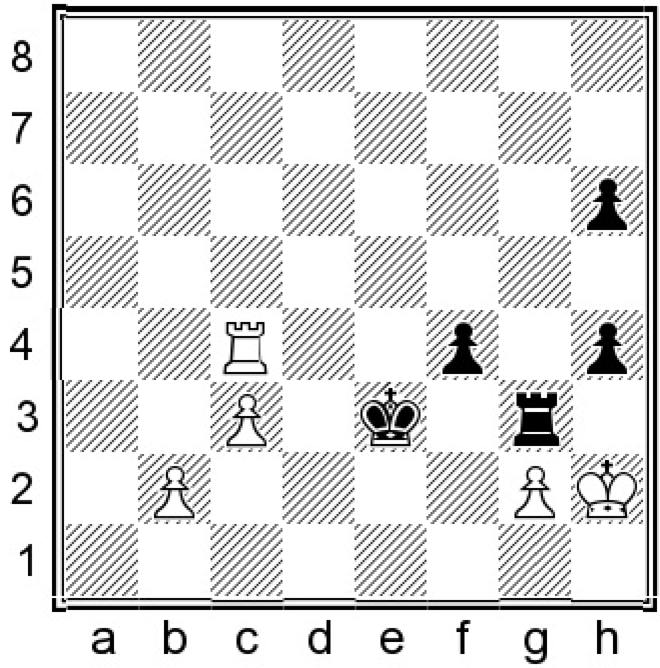
51...h4 52.♖g8+ ♔h5 53.♖f8 ♖f4 54.♖c8 ♖g4 55.♖f8 ♖g3+ 56.♔h2 ♔g5 57.♖g8+!?

This does not seem necessary, but the alternative leads to similar difficulties, e.g. 57.♖c8 ♖g4 and now White has two options:

A) 58.♔h3 might be the correct move, but it leads to problems similar to the game, e.g. 58...h5 59.♖c7 ♖g3+ 60.♔h2 f4 61.♖xc4 ♔g4 62.♖c8 h3 63.gxh3+ ♔f3! and finally the black king supports the advance of the passed f-pawn: 64.b4 ♖g2+ 65.♔h1 ♖b2 66.♖f8 h4 67.♔g1 ♖b1+ 68.♔h2 ♖b3 69.♖c8 ♔f2, followed by 70...f3;

B) 58.♖g8+?! ♔f4 59.♖e8! ♖g3 60.♖e7 h3! and here too Black creates a protected passed pawn, under better conditions: 61.gxh3 ♔f3, with the idea of ...♖g2 and ...♖b2: 62.h4 ♖g2+ 63.♔h3 f4 64.♖c7 ♖g1 65.♔h2 ♔f2 66.♖xc4 f3 67.♖c6 h5 68.♖c5 ♖g2+ 69.♔h1 ♔e3 70.♖xh5 ♖g8 and White will have to give up his rook for the passed pawn very soon.

57...♔f4 58.♖c8 ♔e3! 59.♖xc4 f4



Black is close to crowning his strategy. He will play ...h4-h3 and the f-pawn will be converted into a passed pawn, supported by Black's king and with the enemy king cut off. Now, for the first time in a long time, the defence has to find an only move. Anand begins to panic, and a long and fairly correct defence ends in a debacle.

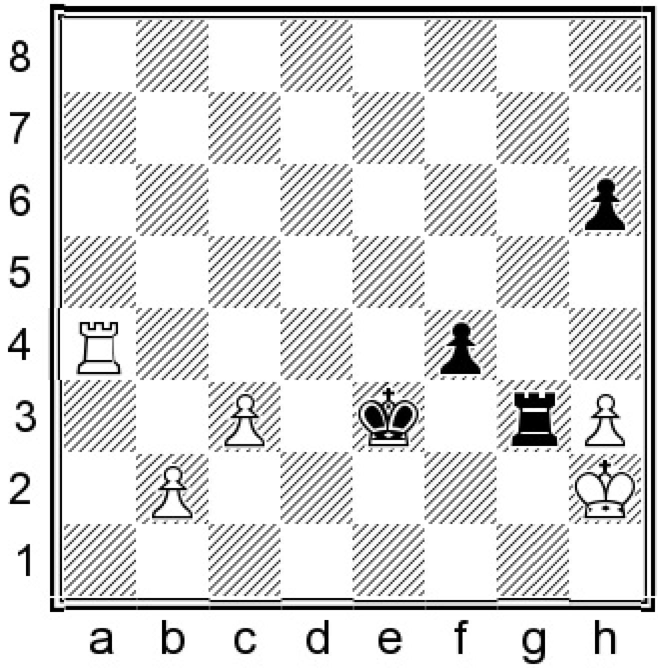
60.♖a4?

60.b4! was the move that led to a draw. The idea is logical, to create counterplay with the pawn as quickly as possible, and the variations are not too complicated, but for a human player it is a brutal psychological shock to be suddenly confronted with the necessity to calculate accurately and make a draw by a single tempo, when just a few moves ago the position looked dead. 60...h3 61.gxh3 ♖g6 62.♖c7 f3 63.♖e7+ ♔d2 64.♖f7 ♔e2 65.♖e7+ ♔f1 (65...♔f2 66.b5 ♖g2+ 67.♔h1 ♖g1+ 68.♔h2 ♖e1 69.♖xe1 ♔xe1 70.b6 and the pawn queens just in time) 66.b5! ♖g2+ (66...f2 67.c4) 67.♔h1 ♖e2 68.♖f7 f2 69.b6 ♔e1 70.b7!, arriving in time.

With the move in the game, White wants to prepare a defence based on checks from the side (the famous long-side defensive method), but his own two pawns block this attempt. It is curious to verify that if either of these two pawns were removed the position would be a draw.

60...h3! 61.gxh3

This position *(above right)* should be compared with the one at the start of this example. Black has lost three pawns and now wins.



61...♖g6 62.c4

There are too many white pawns in the way. 62.♖a8 is a logical defence, to start checking from behind, but it is too slow: 62...f3 63.♖e8+ ♔f2 64.b4 ♖g2+ 65.♔h1 ♖g1+ 66.♔h2 ♖e1–+ 67.♖f8 ♔e2 68.♖e8+ ♔f1, followed by ...f3-f2 and then ...♔e2.

62...f3 63.♖a3+

Or 63.b4 f2 64.♖a3+ ♔f4 65.♖a1 ♖e6–+, followed by ...♖e1.

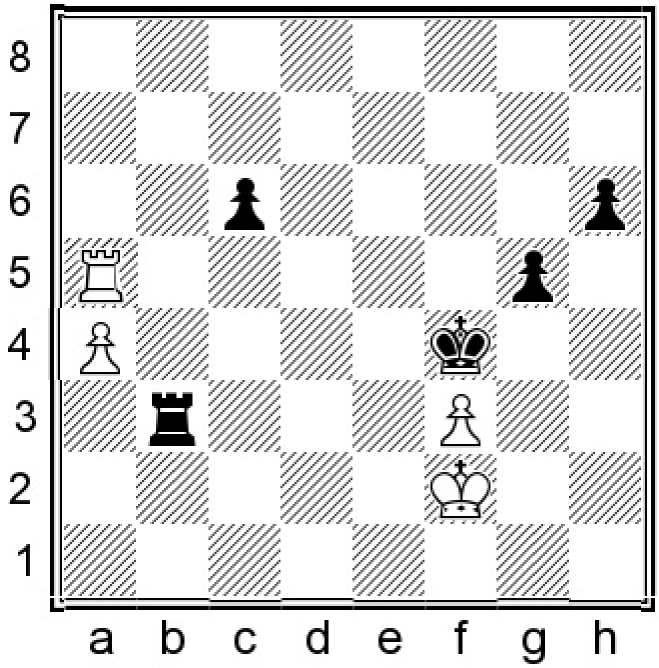
63...♔e2 64.b4 f2 65.♖a2+ ♔f3 66.♖a3+ ♔f4 67.♖a8

If 67.♖a1 ♖e6, followed by ...♖e1.

67...♖g1 0-1

The pawn will cost White his rook.

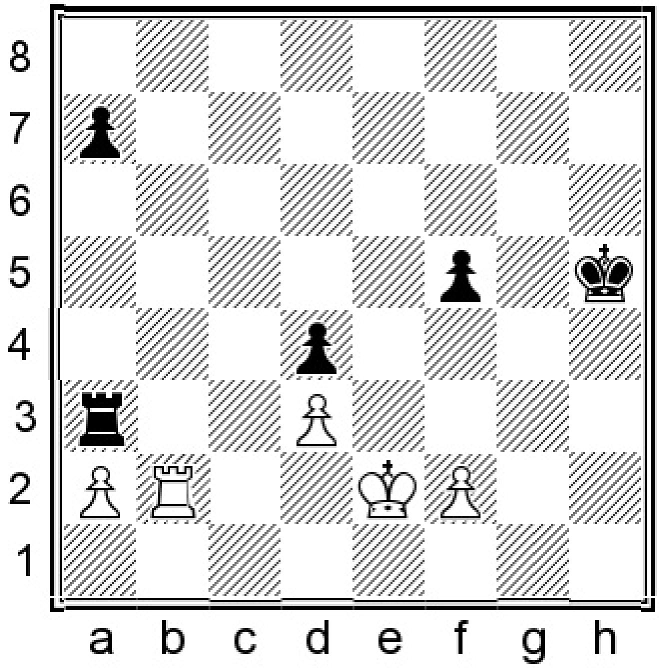
Pattern 69 The dominant king



We have already seen this concept in other endings, but as usually happens it takes on characteristics of its own in a rook ending. In this case it is a question of a king fighting to gain a little more space and restrict the opposing monarch, with the support of a few pawns, but above all assisted by the rook's ability to place the enemy king in check and to worsen its position.

We begin with an example in which the topic is presented in its positive and negative aspects with respect to the two kings.

David Lariño Nieto 2325
Juan Mellado Triviño 2426
Calvia 2005 (9)



White to move

White’s position seems under pressure but not critical, yet with just one careless move it becomes so:

37.♖b4?

Instead of attacking the d4-pawn, the correct move was to sacrifice the pawn on d3 with 37.♔f3!, after which White’s king gains the dominant position: 37...♔g5!? (the capture of the pawn makes things easier for White: 37...♖xd3+ 38.♔f4 ♔g6 39.♖b5 ♖d2 40.f3 ♖xa2 41.♖xf5, and the draw is simple) 38.♖b3! (passivity with 38.♖d2 can end badly, although in this case it would be hard to demonstrate anything more than a slight advantage for Black) 38...♖xa2 (after 38...♖xb3 39.axb3 a5 the pawn ending is a draw) 39.♖b4=. The d4-pawn falls and there is no advantage.

37.♖b4? ♔g4!

Black does understand the importance of advancing the king, although strangely enough he also sacrifices a pawn with check.

38.♖xd4+ f4

Now it is impossible to prevent the black king from reaching either f3 or g3.

39.♖d7?!

Still not losing, but it was much better to play either:

A) 39.♖c4! keeping the rook ready to attack the a7-pawn from the front if Black captures the f2-pawn, e.g. 39...♖xa2+ 40.♔d1 ♖xf2 41.♖a4!=; or

B) 39.♔d2!, which also draws, e.g. 39...♔f3 40.♖c4 ♖xa2+ 41.♔c3;

C) 39.f3+? ♔g3–+ is even worse.

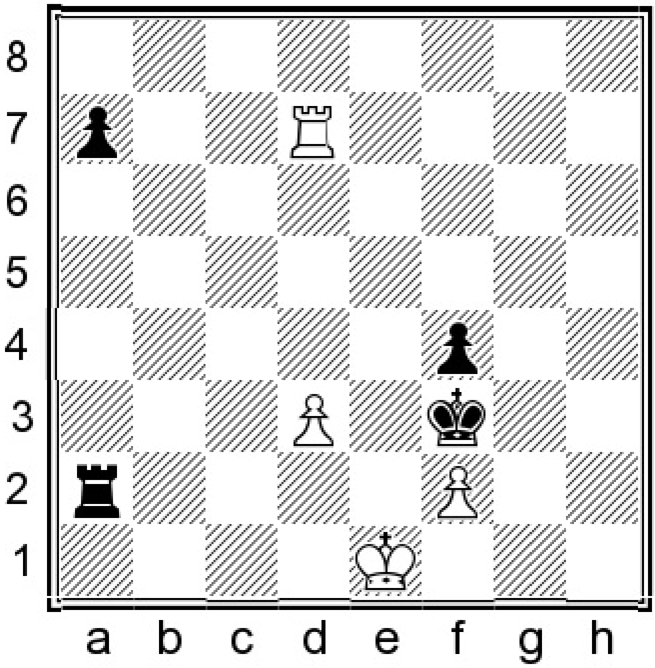
39...♖xa2+ 40.♔e1?

Finally the losing move. Engine assistance confirms that the variation 40.♔d1! ♔f3 41.d4 ♔xf2 42.d5 leads to a draw, but it is clear that White has a very delicate position.

40...a5?!

It is curious that Black does not pursue the idea consistently by advancing his king to f3, although both moves win.

With 40...♔f3! the black king exerts maximum domination:



analysis diagram

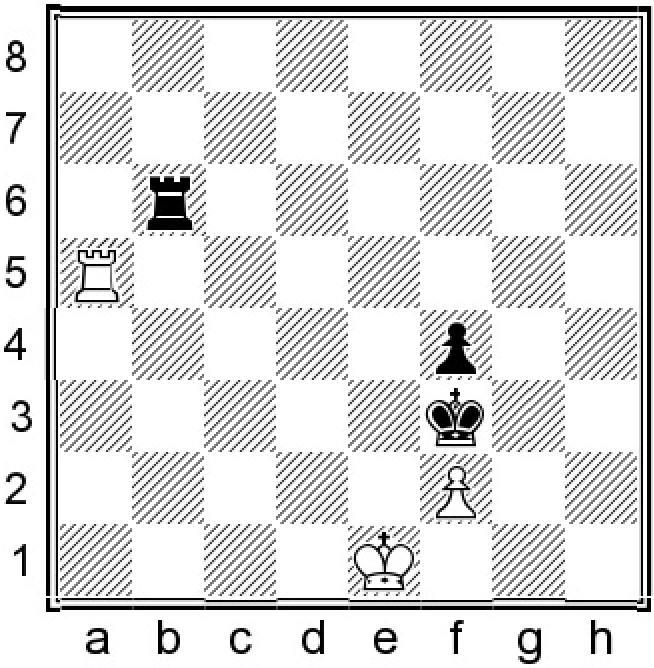
41.d4 (41.♖e7!? a5 42.d4 ♖b2! (preparing both to advance Black's pawn and to control the white passed pawn) 43.d5 ♖b1+ 44.♔d2 ♖b5–+) 41...♖e2+ 42.♔d1 ♔xf2 43.♖xa7 f3 44.d5 ♖e5 45.♖d7 ♔g1 46.d6 ♖g5! (46...♖d5+? does not win: 47.♔c2 f2 48.♖g7+ ♔f1 49.d7!=) 47.♖f7 f2 48.d7 ♖d5+ 49.♔e2 ♖xd7! 50.♖xf2 ♖e7+–+.

41.d4 ♔f3 42.d5 ♖e2+

42...♖xf2 wins, according to the Lomonosov tablebases, but the move in the game is more natural.

43.♔d1 ♖e5?

Now both ways to capture the f2- pawn lead to a draw, but 43...♖b2!, to deploy the rook behind the white pawn, is winning, e.g. 44.♔e1 ♖b5 45.d6 ♖d5 46.♖a7 ♖xd6 47.♖xa5 ♖b6



analysis diagram

and we have reached a very common type of ending. The f2-pawn will fall and since White’s king cannot position itself on the short side (for instance if he could play ♔g1 here) he ends up in a theoretically lost ending.

44.♔c2! ♔xf2 45.♔c3?

White has taken immediate advantage of the opportunity offered for counterplay but now he misinterprets it. 45.d6! f3 46.♖h7 a4 47.d7 would have forced the draw.

45...f3! 46.♔c4?!

The king moves to a square where it will be in check when Black’s f-pawn promotes to queen, but 46.♔d4 also loses: 46...♖g5 47.♖f7 ♖g4+! 48.♔c5 ♔g2–+.

46...a4?!

It was simpler to play 46...♖f5 47.d6 ♔g3 48.♖g7+ ♔f4 49.d7 f2–+.

47.d6 ♖e2?

Now 47...♖a5 was still winning, but only thanks to some very subtle details: 48.♖e7 (48.♖h7 a3 49.d7 ♖a8–+) 48...a3 49.d7 ♖a4+ 50.♔b3 a2 51.d8=♕ a1=♕ and it is hard to believe that in this position, even though White can check first, he loses: 52.♕d2+ (52.♕b6+ ♕d4!) 52...♔g3! 53.♕d6+ ♖f4–+ 54.♕g6+ ♖g4 55.♕d6+ ♔g2 56.♕d2+ f2 57.♕d5+ ♔g1 and the checks run out.

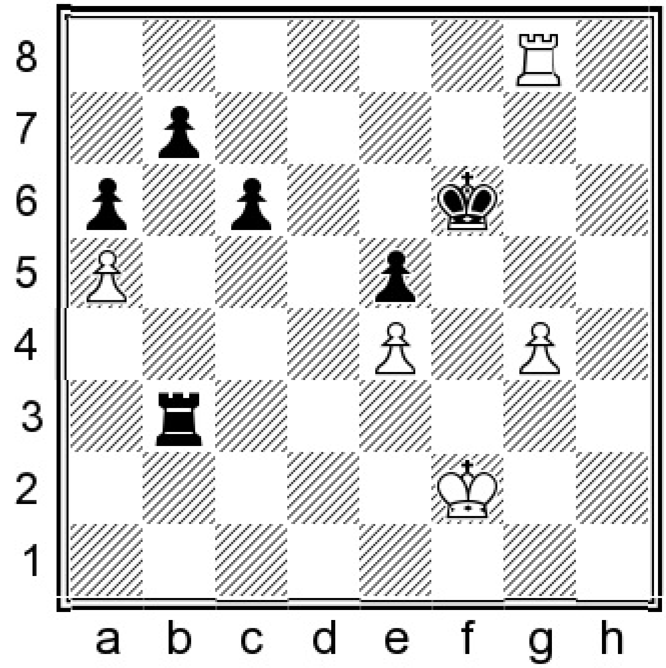
48.♖a7 ♖d2 49.♔c5

The king supports the passed pawn and the draw is immediate.

49...♔e3 50.♖xa4 f2 51.♖a1 ♖c2+ 52.♔b6 ♖d2 53.♔c7 ♔e2 54.d7 ♖xd7+ 55.♔xd7 f1=♕ 56.♖xf1 ♔xf1 57.♔e6 ½-½

In the next example, the side with the material advantage wasted his winning chances, little by little, always through not paying enough attention to the activity of his king.

Jacek Bednarski
Mato Damjanovic
Kecskemet zt 1964



Black to move

Black has an extra pawn and the more active rook. The white king is cut off and there are potential targets on e4 and a5. This should be enough to win, but in his favour White also has some trumps: a passed pawn on g4, to divert attention, as well as a pawn on a5 which restrains the black majority.

44...♖b5?

Typically careless play, the product of overconfidence. The snag with this move is that it allows the white king to join in the battle.

Instead, 44...♖a3!, keeping the white king cut off, should have won, let us see how: 45.g5+ (45.♖b8 ♔g5! leads to an almost identical variation: 46.♖xb7 ♔xg4 47.♖f7! ♖xa5 48.♖f5 ♖c5 and the a-pawn starts to advance) 45...♔f7 46.♖b8 ♔g6 47.♖xb7 ♔xg5 (the black king becomes dominant) 48.♖f7

♖xa5 49.♖f5+ (49.♔e3 ♖c5!–+) 49...♔g4 50.♖f6 ♖c5 51.♔e3 a5–+.

44...♖b5? 45.g5+?

Wasting the first chance to activate the king. After 45.♔g3! ♖xa5 46.g5+ ♔f7 47.♖b8 ♔g6 (47...♖b5 48.♔g4 ♔g6 49.♖g8+ is the same) 48.♔g4! the big difference is that the white king is becoming dominant and now if Black continues with the natural 48...♖b5? 49.♖g8+ ♔f7 50.♖b8, White threatens to play 51.♔f5 and draw. In fact though, Black can still win with 48...♖a4, transposing to the game.

45...♔f7! 46.♖b8 ♖xa5?

Black insists on making his winning task more difficult. It seems that he discounted the importance of advancing his king: 46...♔g6! 47.♖g8+ ♔h5! 48.g6 (48.♔g3 ♖xa5 49.g6 ♖a3+! and the white king is forced back) 48...♔g5! (better than 48...♖xa5 49.g7 ♔g6 50.♖b8 ♔xg7 51.♖xb7+ ♔f6 52.♖b6, which should also win by applying the same concept of the dominant king: 52...♔g5! 53.♖xc6 ♔f4–+) 49.g7 (49.♖g7 ♔f6 50.♖g8 ♖xa5–+; 49.♔g3 ♖b3+ 50.♔g2 ♔f6 51.♔f2 ♖b5–+) 49...♔g6 50.♔f3 ♔f7–+, capturing the second pawn.

47.♔f3!

Finally White advances the king, which will gain the dominant position. It is rather late, but in practice it will be enough to save the half point. 47.♖xb7+ ♔g6? would have lost very easily.

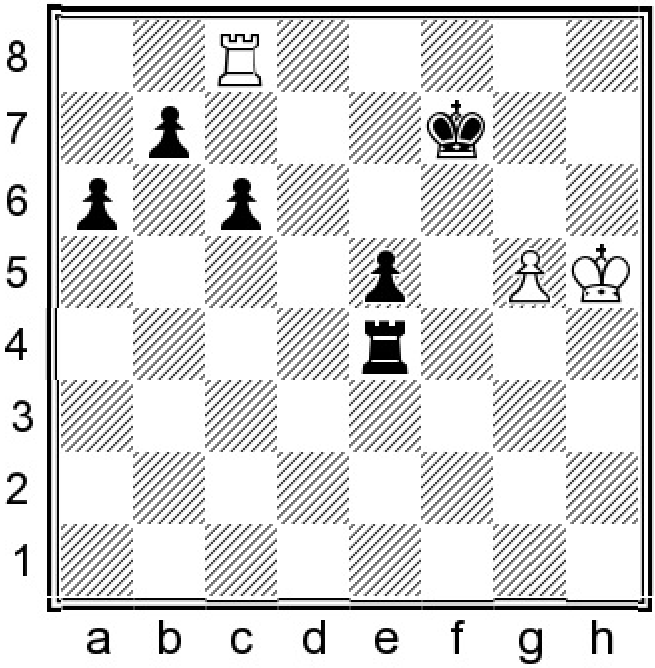
47...♔g6 48.♔g4 ♖a4

48...♖b5 49.♖g8+ ♔f7 50.♖b8= leads to a position we have already seen in various variations.

49.♖g8+ ♔f7 50.♖c8!

50.♖b8 ♖xe4+ 51.♔h5 (51.♔f5? ♖f4+ 52.♔xe5 ♖b4 loses) 51...♖b4 52.g6+ ♔g7 53.♖c8 should also have been adequate to draw.

50...♖xe4+ 51.♔h5



51...♖b4?

Black still had a winning line (suggested by the engines), but it is much more difficult now: 51...♖e1! 52.g6+ ♔f6 53.♖f8+ ♔e6 54.g7 ♖h1+ 55.♔g6 ♖g1+ 56.♔h7 a5 57.g8=♕+ ♖xg8 58.♖xg8 (58.♔xg8 a4–+) 58...a4 and the Lomonosov tablebases confirm that this position is winning, but it is a position that it would be more appropriate to analyse in the chapter on rook vs pawns.

52.g6+ ♔f6

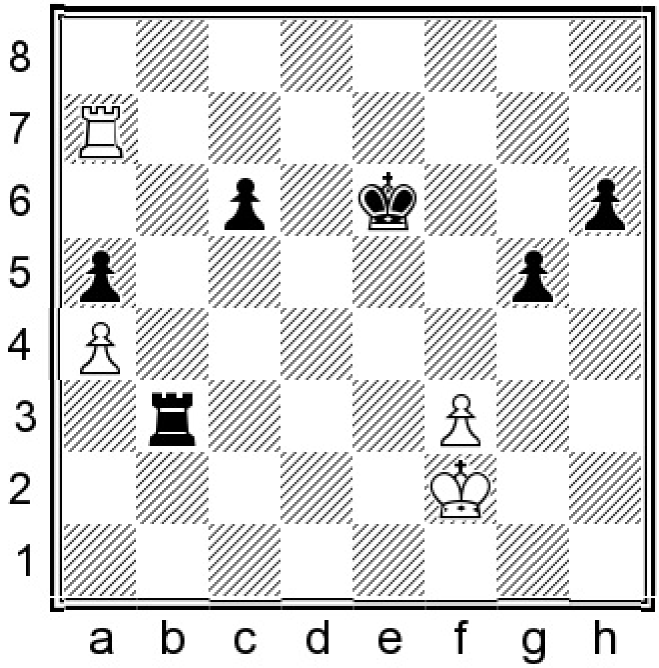
52...♔g7 53.♔g5!=.

53.♖f8+ ♔g7 54.♖f7+ ♔g8 55.♔h6

And White has achieved the ideal coordination of the previous theme (**Pattern 68** – The king supports the passed pawn), which in this case compels Black to force the draw.

55...♖b1 56.♖c7 ♖h1+ 57.♔g5 e4 58.♖c8+ ♔g7 59.♖c7+ ♔f8 60.g7+ ♔g8 61.♔f6 ♖f1+ 62.♔g6 ♖g1+ 63.♔h6 ½-½

Daniel Zamarbide 2192
Unai Garbisu de Goñi 2447
Pamplona 2012



Black to move

Black is two pawns up, but the win is not easy, because the white rook will be able to capture one of them in the next few moves. As a matter of fact, of the black king's three possible moves forward, only one wins:

43...♔f5?

A) 43...♔e5! is the most precise square, keeping two objectives open: *the dominant king and the king supports the passed pawn*. 44.♔g3 (preventing *the dominant king*; if 44.♖xa5+ ♔f4!, as in the game) 44...c5! 45.♖xa5 ♔d4 and now the king supports the passed c-pawn and White will soon have to give up the rook for it;

B) 43...♔d5? 44.♖xa5+ ♔d4 45.♖a6 c5 46.♖d6+ ♔c3 47.♖xh6 – White has captured one pawn more than in the variation with 43...♔e5 and his rook is better placed. This should be enough to draw, e.g. 47...c4 48.a5 ♔b2 49.a6 c3 50.a7 ♖a3 51.♖b6+ ♔c1 52.♖b7 c2 53.♔e2=.

43...♔f5? 44.♖xa5+?

White seems to be unaware of the theme. 44.♔g3! and although the black king is one rank further forward, White's king is dominant, because his rook is threatening checks (both from the side and from behind): 44...c5 (44...g4? 45.♖xa5+=) 45.♖xa5 ♖c3 46.♖a8! c4 (46...g4? is still bad, due to 47.♖f8+=) 47.a5 ♖a3 48.a6 c3 49.a7, forcing the ending of two pawns against one on the same wing, which is a draw.

44...♔f4!

The black king takes up the dominant position and gains a decisive advantage for his side. Subsequently the game was marred by various incidents, which we shall point out but without full commentary, since they depart from our main theme.

45.♖c5 ♜b2+ 46.♔f1 ♔xf3 47.♖c3+ ♔e4?

Here 47...♔g4! 48.♖xc6 ♔h5 wins, with the plan of preparing the gradual advance of the pawns and placing the rook behind the enemy passed pawn.

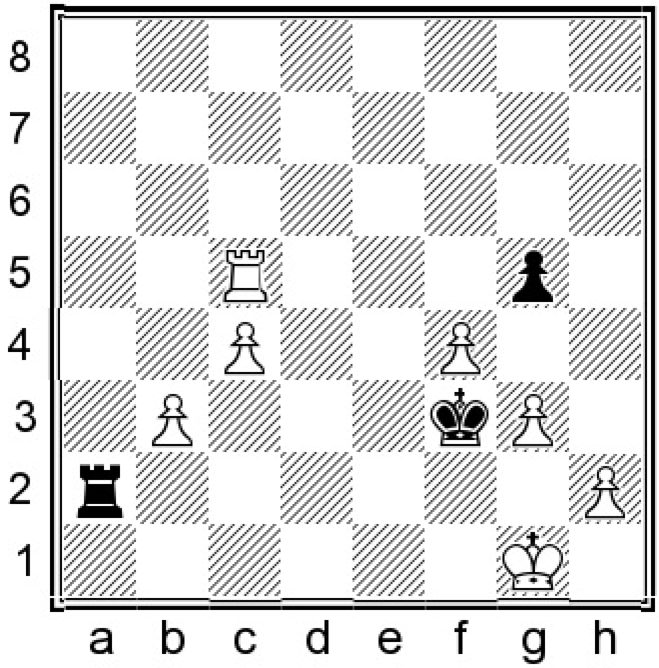
If 48.♖a3 then it seems simplest to play 48...c5, e.g. 49.a5 c4 50.a6 c3 51.♖xc3 ♜a2 etc.

48.♖xc6 h5 49.♖c5 ♔f4 50.♖c4+ ♔f5 51.♖c5+ ♔g4 52.♖c4+ ♔g3 53.♖c5?

It is difficult to understand why White stopped checking; 53.♖c3+!=.

53...♔h4 54.a5 ♜a2 55.♔g1 g4 56.♔f1 g3 57.♔g1 ♔g4 58.♔f1 h4 0-1

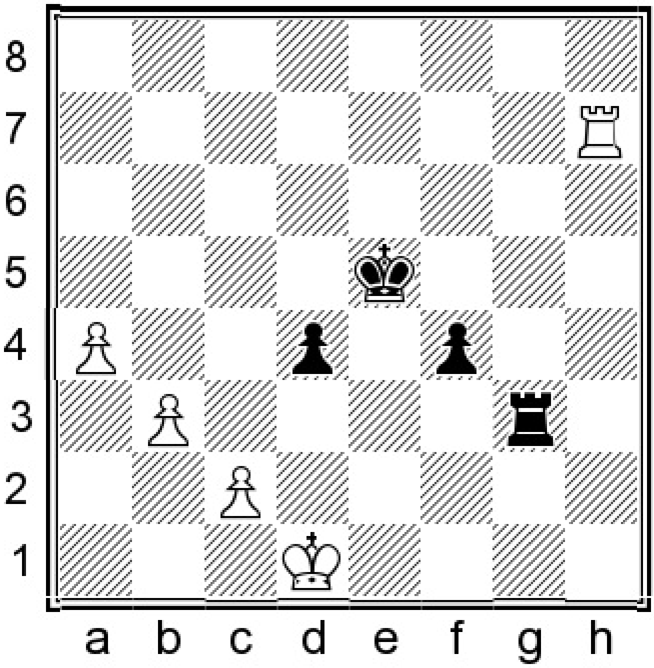
Pattern 70 King on the edge



In rook endings, when a king is trapped on the edge it can give the opponent the opportunity to play for mate or, much more frequently, it can compensate for a big material disadvantage with threats of perpetual check. Both these resources are unexpected and are often overlooked.

Let us once again begin with a historic example, one which is difficult to ignore.

Paul Keres
Erich Eliskases
Noordwijk 1938 (4)



White to move

We join the game a few moves before our theme appears, to check whether both players had any other options of the same worth as the game continuation. White has an extra pawn, connected pawns, and a dangerous a-pawn, but his position has a serious defect which is most famous precisely as a result of this game. His king is on the edge and this allows various counterplay manoeuvres:

42.a5 f3

42...♖g1+ draws more easily, e.g. 43.♔d2 ♖g2+ 44.♔c1 f3 45.♖f7 f2 46.♔d1 ♔e4 47.a6 ♔e3 48.♖e7+ ♔f3, forcing a repetition.

43.♔e1

In view of what follows, it would have been logical to have moved off the edge with 43.♔d2, but after 43...♖g1 (43...♖g2+ also draws) 44.♖f7 ♔e4 45.a6 ♖a1 46.a7 f2 47.♖xf2 ♖xa7 Black has a drawn ending, although he will need to play on a pawn down for some moves.

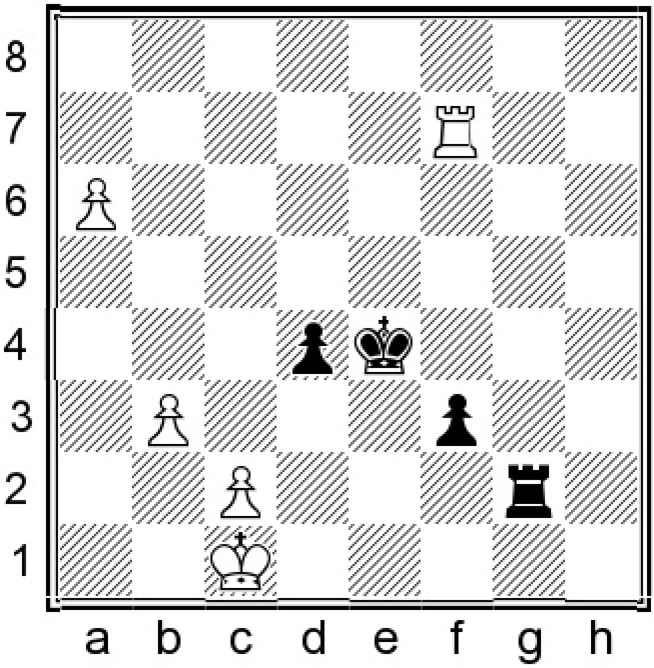
43...♔f4 44.♔d2

Instead, after 44.♖f7+ ♔e3 White must keep checking.

44...♖g1 45.♖f7+ ♔e4 46.a6 ♖g2+

Now it seems to be Black who is rejecting the drawn ending resulting from 46...♖a1 47.a7 f2 48.♖xf2 ♖xa7±.

47.♔c1



The scene is set. White's pawn is now really dangerous and the saving moves are few and far between.

47...d3!

Clearly seeking to exploit the position of the white king.

A) 47...♔e3? loses to 48.a7 ♖g8 49.b4 f2 50.b5 and the white pawns win on their own;

B) 47...♖g1+? also loses after 48.♔b2 ♖g6 49.a7 ♖a6 50.b4 f2 51.♖xf2 ♖xa7 52.♔b3!;

C) 47...♖g6! is the only other move to draw, but once again it means acquiescing to the ending of two pawns against one: 48.a7 ♖a6 49.♔d2 ♖a1! 50.♖g7 f2 51.♖f7 ♖xa7=.

48.cxd3+ ♔e3 49.b4

The pawns advance together. Instead, 49.a7 ♖a2 50.♔b1 ♖a6 51.b4 f2, with the threat of ...♖a7, would have forced White to play 52.♖e7+ ♔xd3 53.♖f7 ♔e3 54.♖e7+, with equality.

49...♖a2 50.b5 f2 51.d4 ♔xd4

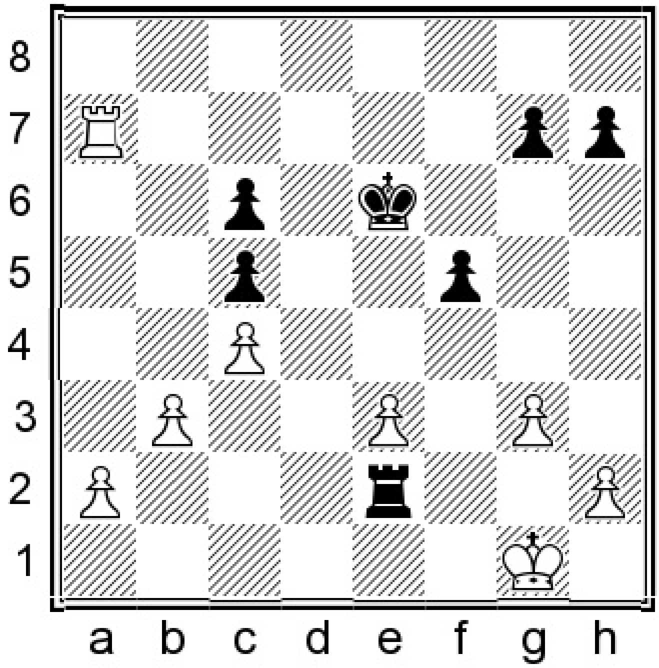
There are definitely other moves to draw, but none of them are trivial to calculate, e.g. 51...♖a5! 52.d5 ♖xb5 53.d6 ♖b4!=, preparing ...♖f4. What always saves Black is the position of the white king.

52.♖xf2 ♖xf2

White has given up the rook and the rest of the game can be seen in **Pattern 30**.

Shortly after, a young Smyslov exploited the same theme.

Andor Lilienthal
Vasily Smyslov
Leningrad 1941 (1)



Black to move

Black’s structure is bad, the enemy rook is on the seventh rank and he is already a pawn down. However his position has one big trump: the white king is trapped on the back rank. The very young Smyslov demonstrates his instinct for active play and it is possible that he was not worried at all:

29...g5!?

It was possible to rush the king forward right away with 29...♔e5!? 30.♖xg7 (30.♖e7+ ♔f6 31.♖c7 ♔e5 32.♖xc6 ♔e4 33.♖xc5 g6, preparing ...♔f3, and Black cannot lose) 30...♔e4 31.♖xh7 (31.♖f7 ♖xa2=) 31...♔f3 (threatening to give mate) 32.h4 ♖e1+ 33.♔h2 ♖e2+ 34.♔h3 ♖e1, and a draw by repetition is unavoidable.

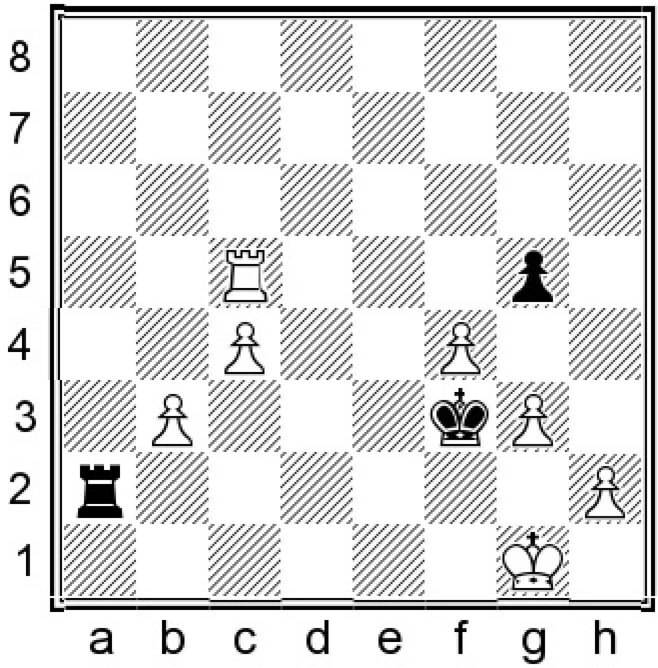
29...g5!? 30.♖xh7

After 30.h4?! g4!, this pawn further restricts the white king: 31.♖xh7 ♖xa2 32.h5 ♖e2 33.h6 ♖xe3 34.♔f2 ♖f3+ 35.♔g2 ♖xb3 and after losing three pawns, one after the other, it is White who must fight for the draw.

30...♖xa2 31.♖h6+ ♔e5!

Sacrificing all the pawns in order to activate the king as much as possible.

32.♖xc6 ♔e4 33.♖xc5 f4 34.exf4 ♔f3

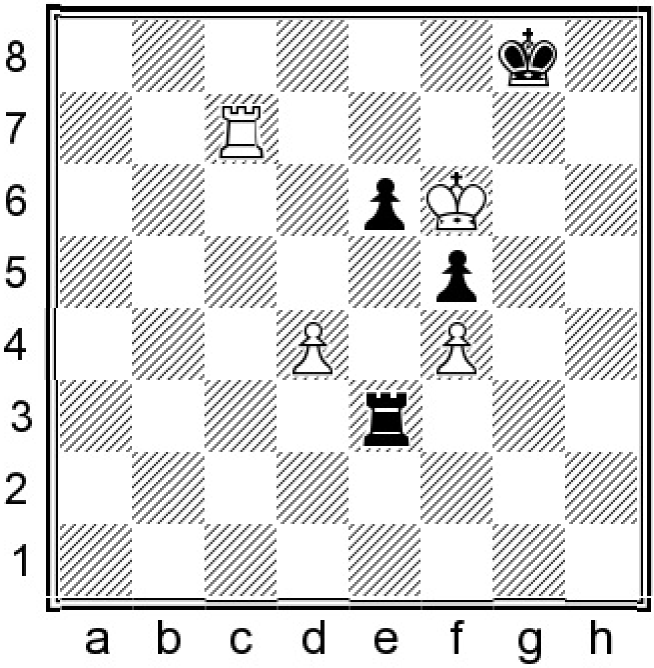


This is the position which we used as a poster to introduce this section. Very neat; Black has sacrificed all his pawns and is now four (!!!) pawns down, and yet White must accept the draw.

35.h3 ♖a1+ ½-½

Some positions with the king on the edge lead to mating nets, sometimes by mistake, sometimes unavoidably.

Boris Gelfand 2738
Wang Hao 2742
London 2012 (4)



White to move

52.♖g7+?!

Coming from a drawn position, White still cannot believe his luck.

52.♖c8+! ♔h7 53.♔f7 and mate with ♖c8-c1-h1 can only be avoided at the cost of losing the pawns: 53...♖e1 54.♖c2 ♖h1 55.♔xe6+–.

52.♖g7+?! ♔f8

52...♔h8 53.♖g1 would have led to the mating net and therefore to the loss of the pawns.

53.♖h7 ♔g8 54.♖h1?

When you do not believe, you do not see. With this move, White allows his opponent to escape completely.

54...♖e4 55.♖d1 ♔h7?

What was Wang Hao thinking here, making this move when he could capture a pawn and bring the draw even closer? 55...♖xf4 56.♔xe6 ♔f8 57.d5 ♖e4+ 58.♔d6=. Surely he must have felt a bit uncomfortable in view of the poor position of his king?

56.♔f7! 1-0

Finally Gelfand, with mate so close, found the move which closes the net. Wang Hao looked very surprised and resigned.

The rook will be the star of the following sections, in contrast to the previous ones, which focused more on the role of the king. The rook is the strongest piece in this ending and as such it is logical for its position to be very important; in particular the difference in value between an active rook and a passive one is enormous – the equivalent of a pawn at least. However, all the examples basically reflect a way of coordinating all the leading pieces and the passed pawns.

Pattern 71 The seventh rank

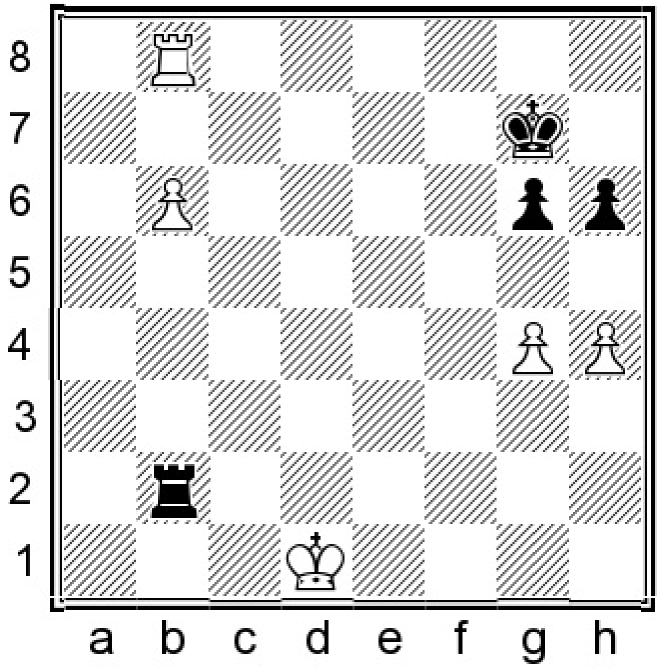
The strength of a rook on the seventh rank is one of the first things we learn as beginners. The fact is that the influence of this theme is greater in the middlegame, or in endings with few pieces, rather than in endings with a single rook, although here it is still an advantage.

By observing just two measures we can easily evaluate the importance of the seventh rank: one is the extent to which it limits the activity of the enemy king, the extreme case being the so-called *absolute seventh*; the other is the degree of stability of the rook on the seventh, in other words, whether it is possible to expel it, through the coordinated action of the defender's rook and king.

We shall present the examples in steps, ranging from the most favourable to the rook on the seventh down to the least favourable.

We call it the *absolute seventh* when the king is trapped on the eighth rank and is unable to escape because there are no pawns to shield it. This advantage is usually decisive.

Kim Pilgaard 2315
Nicholas Jakubovics 2220
Hastings 1995/96 (1)



White to move

White quickly exploits the chance to trap the enemy king using the absolute seventh.

51.g5! hxg5 52.hxg5 ♖b5

Black could have retained the option to bring out the king with 52...♔f7 53.♔c1 ♖b5 54.♔d2. The problem is that with the king on f7 Black cannot capture the g-pawn and therefore the white king can approach without problems: 54...♖xg5? 55.b7 ♖b5 56.♖h8+–.

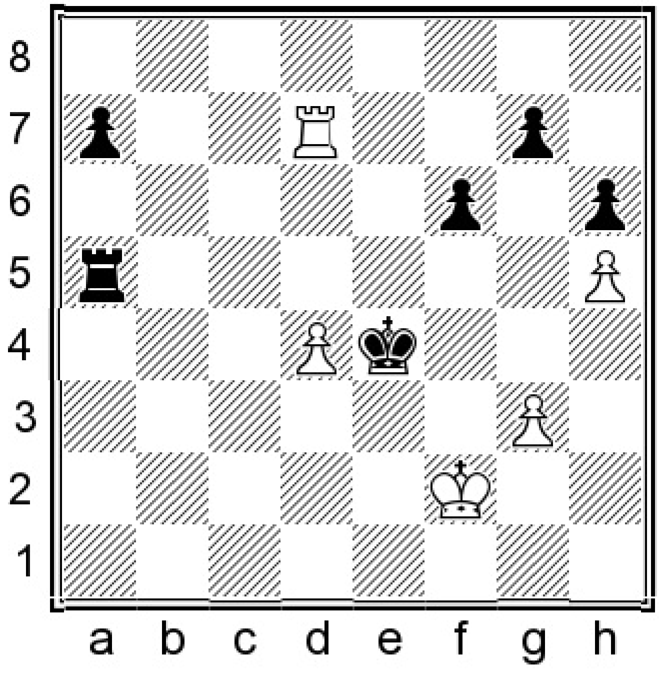
53.♖b7+

Forcing the king back onto the eighth rank.

53...♔g8 54.♔c2 ♖xg5 55.♖c7! 1-0

This is the manoeuvre that Nimzowitsch already explained in *My System*. It is not possible to prevent b6-b7, ♖c8+ and b7-b8=♕.

Siegbert Tarrasch
Emanuel Lasker
Berlin 1918 (variation)



Black to move

Strangely, here Lasker declined the opportunity to achieve the *absolute seventh*. We shall analyse how the game might have continued:

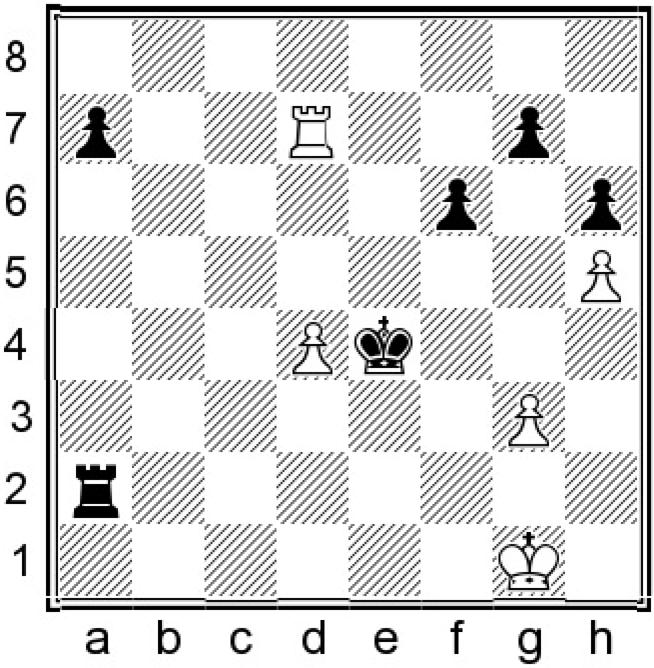
44...♖a2+

The continuation of the game should have led to a draw: 44...♖g5 45.♖xa7 ♔xd4 46.♖a4+ ♔d3 47.♖h4 (White should have drawn with 47.♖a7) 47...♖f5+ 48.♔g2 ♔e3 49.♖g4 ♖g5 50.♖h4 f5

51.♔h2? (51.♔h3=) 51...♖g4–+ 52.♖h3 ♔f3 0-1 Tarrasch-Lasker, Berlin 1918.

44...♖a2+ 45.♔g1

45.♔e1 prevents the black pawn from promoting but loses after 45...a5 46.♖xg7 a4 47.♔d1 a3 48.♔c1! ♖h2 49.♔b1 f5 50.♖a7 a2+ 51.♔a1 (51.♖xa2? ♖xa2 52.♔xa2 ♔xd4–+) 51...♔xd4 and if 52.g4, seeking the *crazy rook*, Black wins with 52...f4!.



45...a5!

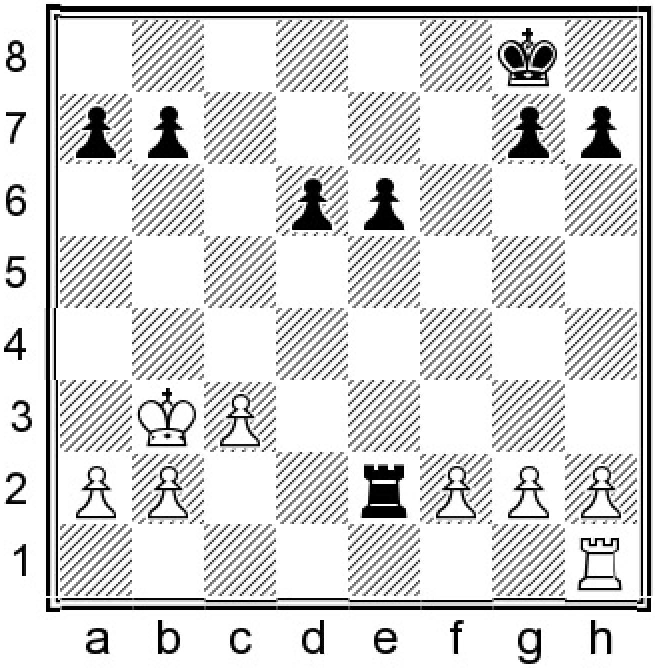
Now the advance of the black pawn prevents White from capturing more than one pawn on the kingside.

46.♖xg7 a4! 47.♖g6?!

47.♖a7 might have held out a little longer: 47...♔xd4 48.♖a6 a3–+; 47...a3! 48.♖xf6 ♖b2 and once again we have the pattern of the *absolute seventh*; the passed pawn will queen: 49.♖a6 a2–+.

Now an example in which the rook does not have the *absolute seventh*, but cannot be dislodged.

Boris Spassky 2551
Alexei Shirov 2751
Paris 2000 (2)



White to move

21.♖f1

21.♖d1 d5! 22.c4 dxc4+ 23.♔xc4 ♖xb2–+.

21.♖f1 d5 22.a4 ♔f7 23.a5 e5

In this first phase Black centralises the king and advances his centre pawns.

24.♔a3 ♔e6 25.b3 g5

Restricting the movement of the white kingside pawns, which keeps the rook tied down. 25...d4!? was another very strong plan, e.g. 26.cxd4 exd4 27.♔b4 ♔d5–+.

26.♔b4 h5 27.h3

27.a6 bxa6 28.♖a1 activates the rook but loses too many pawns: 28...♖xf2 29.♖xa6+ ♔f5 30.♖xa7 ♖xg2–+.

27...e4 28.g3 ♔e5 29.♔c5 ♖d2!

Prophylaxis against a possible f2-f4.

30.♔b4

30.f4+ gxf4 31.gxf4+ ♔f5–+.

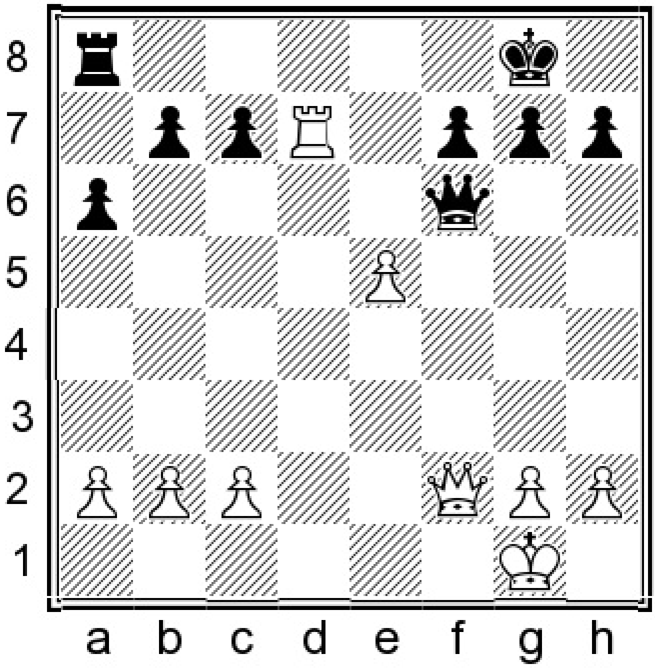
30...h4 31.gxh4 gxh4 32.a6 bxa6 33.♖a1

White grows tired of absolute passivity, but the counterplay he achieves is not very great.

33...♖xf2 34.♖xa6 ♖f7 35.♖h6 e3 0-1

After two examples of *absolute seventh*, and one of what we might call *indisputable seventh*, we shall see a case involving a struggle to eject the rook from the seventh rank.

Tatiana Morosova
Mari Sammul
USSR tt 1962



Black to move

The queens are still on the board, but the two variations which do not lose material lead to a rook ending with the white rook on the seventh.

24...♕xf2+?

24...♕xe5? 25.♕xf7+ ♔h8 26.♕e7 ♕xe7 27.♖xe7 ♖c8 28.♔f2 would have left the white rook with a widened seventh rank, from which it could not be expelled.

In contrast, with 24...♕e6! 25.♖xc7 ♖d8 Black would have obtained sufficient counterplay.

24...♕xf2+? 25.♔xf2 ♖c8

Black prepares to eject the white rook from the seventh rank and thus equalise the game.

26.♔e3 ♔f8 27.♔f4 a5

When it is not possible to eject a rook from the seventh rank, the first step in the defensive procedure consists of removing all the pawns from that rank.

Black now discovers that 27...♔e8 does not work due to 28.e6!+–, a typical sacrifice to increase the influence of the rook along the seventh rank, which leaves Black defenceless after 28...fxe6 29.♖xg7, after which it is not possible to prevent the exchange of rooks, which would result in a winning pawn ending.

28.g4 b6 29.h4 c5

Black has removed all her queenside pawns from the seventh rank, but the king remains restricted.

30.h5 ♖c6 31.♔e4?

31.♖d8+! ♔e7 32.♖g8 (32.♖b8!?) 32...g6 33.♖h8 gxh5 34.g5 and the white rook will return to the seventh rank with great force.

31...♔e8! 32.♖b7 g6 33.hxg6?!

White continues to make inaccuracies. Here 33.♔d5 ♖e6 34.c4 would have maintained great control.

33...♖xg6!

The black rook becomes active. 33...hxg6? 34.♔d5 would have left Black's pieces in a sad situation.

34.♔f5 ♔f8 35.♖d7?!

35.c4!? ♖h6 36.b3±.

35...♔g7?

Finally, a serious mistake decides the game. After 35...♖h6!, permanently activating the rook, Black should not have lost.

36.♖d6

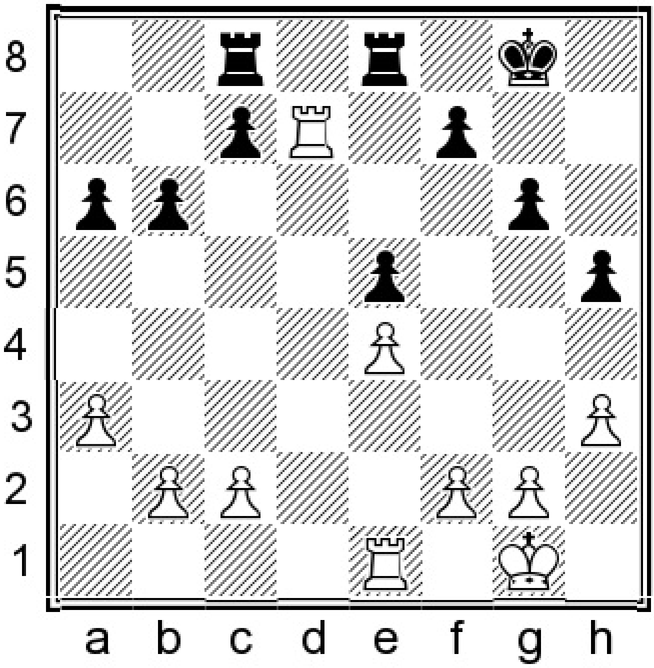
Now Black is unable to prevent the exchange of rooks, after which the dominant position of the white king will be decisive.

36...♔f8 37.♖xg6 fxg6+ 38.♔e6 ♔e8 39.g5 b5 40.♔f6 ♔f8 41.e6 c4 42.e7+ ♔e8 43.a3 1-0

Finally, we shall see a situation where the seventh rank cannot be exploited.

Yaacov Zilberman 2516

Boris Avrukh 2609
Tel Aviv 1999 (3)



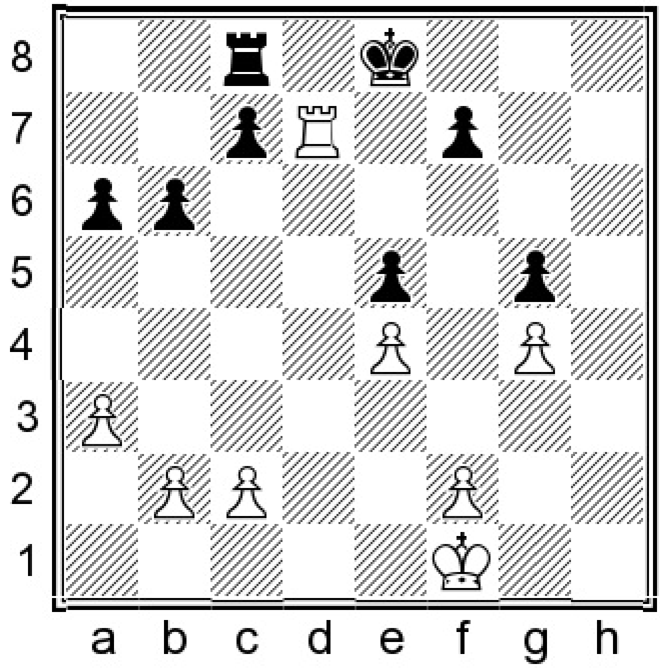
Black to move

The white rook is on the seventh, but Black will gradually expel it.

24...♖ed8 25.♖ed1 ♖xd7 26.♖xd7 ♔f8 27.g4 hxg4 28.hxg4 g5!

28...♔e8 29.♖d5 f6 30.g5 ♖d8! also draws: 31.♖xd8+ ♔xd8=.

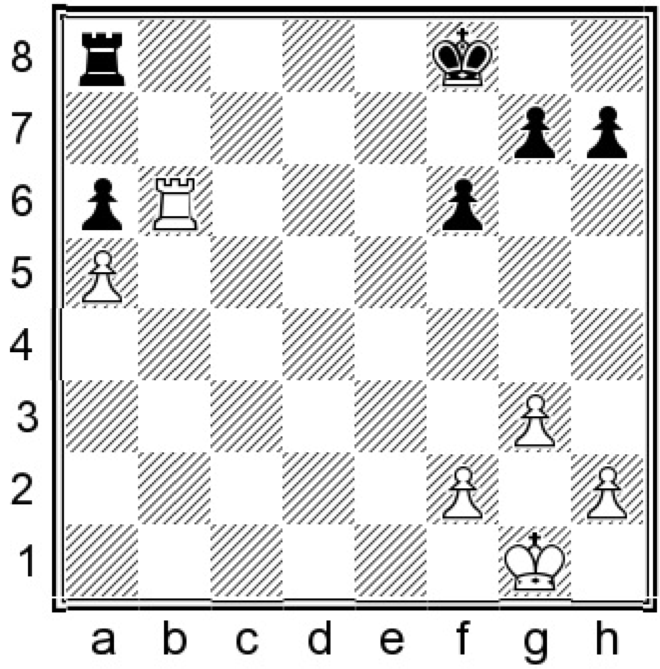
29.♔f1 ♔e8



The white rook is permanently expelled from the seventh rank and there is now total equality.

30.♖d5 f6 31.♖d3 ♖d8 32.♔e2 ♖xd3 33.♔xd3 ♔d7 34.♔c4 ♔d6 35.a4 c5 36.c3 ½-½

Pattern 72 Active rook vs passive rook



The theme of an active rook versus a passive rook is one of the most important in rook endings. In its most visual expression it consists of one side's rook attacking a pawn which the enemy rook defends, thus condemning it to passivity, until the moment when the defender decides that it is better to give up the pawn.

The rook is the piece which loses the most activity if it has to position itself defending a pawn from behind. When a rook takes on that role, it remains in a zone of darkness, as it were, and is unable to influence events.

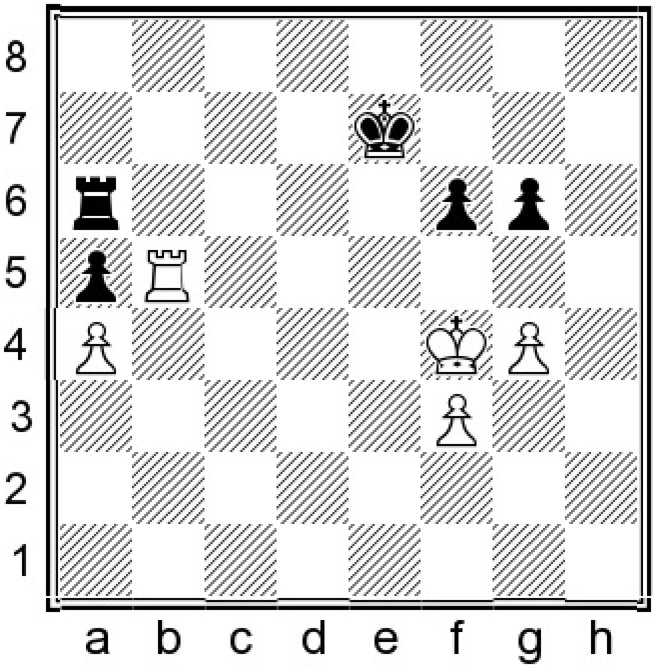
Experience has amply demonstrated that it is almost always preferable to activate the rook, even at the cost of losing the pawn it was defending, although on occasion it is necessary to wait for the appropriate moment.

Many authors assess that an active rook is worth at least a pawn, an evaluation with which I agree. I think it's interesting to complete this assessment with a couple of observations about positions with an extra pawn:

1) if the side which is a pawn down has an active rook, they will almost certainly not lose (and sometimes they will draw even two pawns down);

2) if the side with the extra pawn has an active rook, they will almost always win.

London
St Petersburg
Telegraph match 1886/87



Black to move

This is the position of a historic game. Analysing only the passive variations, the black team came to the conclusion that it was useless to continue the resistance. The position was subsequently analysed by Chigorin, Lasker and Fine and later in the classic book on rook endings by Levenfish and Smyslov, who carried out a very full analysis. The important point is that they all came to the same conclusion: the position is a draw, but at some point Black must give up the pawn and activate the rook. Persisting with passive defence loses, because in the end the white king will approach the a5-pawn and win it in the most favourable circumstances.

1...♖c6!

This is the active move, which should lead to a draw, although it can be delayed. First let us analyse the passive defence:

1...♖a7?!. The white king is already very active and any loss of time can be sufficient to surrender any last hopes, but in fact Black still has drawing chances here: 2.♔e4 ♖a6 (it is now doubtful whether 2...♖c7!? draws, e.g. 3.♖xa5 ♖c4+ 4.♔d3 ♖f4 5.♔e3 ♖b4 6.♖a8 f5 7.a5 and Black has no time to capture the g4-pawn due to the threat of a6, so he should lose) 3.♔d4 ♖a7 4.f4 ♖a6?! (persisting with passivity is what leads to defeat; with 4...♖d7+! Black still seems able to keep within the drawing margin: 5.♔c5 ♖c7+=) 5.♖b7+ ♔e6! (5...♔d6? – trying to prevent ♔c5 – 6.f5 gxf5 7.gxf5 ♖a8 8.♖b6+ ♔e7 9.♔c5 ♖d8 10.♖b5+–) 6.♔c5 f5 7.g5 ♖c6+! 8.♔b5 ♖c5 and the unexpected and desperate resource of the *crazy rook* still saves Black.

1...♖c6! 2.♖xa5 ♔e6!

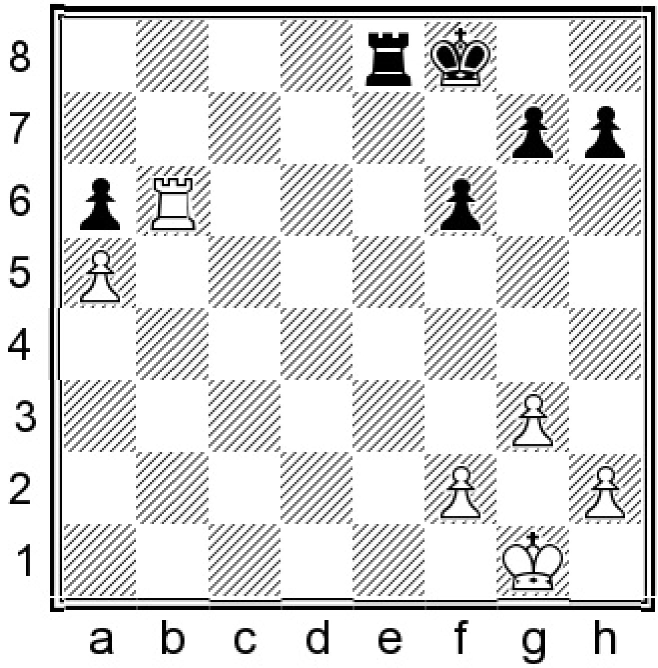
I think this move draws most easily. Levenfish and Smyslov analysed 2...♖c4+ 3.♔e3 ♔f7!, which also leads to a draw.

3.♖a8 g5+ 4.♔e3 ♖c3+ 5.♔f2 ♖c2+ 6.♔g3 ♖a2 7.a5 ♔f7 8.a6 ♔g7

Black draws easily, because the white king cannot escape from its confinement without sacrificing a pawn. This type of position, with an extra pawn and the stronger side's rook in front of its pawn, will be discussed in **Pattern**s **74** to **76**.

We shall now see a practical game, with some very human decisions.

Jesus de la Villa
Mario Gavilan
Benasque 2013



Black to move

32...♖a8?

Material is an irresistible concept. But we should convince ourselves that passive defence in positions like this ends up losing. Now White can play as he pleases. Instead, the best way was to activate the rook as soon as possible with 32...♖e1+ 33.♔g2 ♖a1 34.♖xa6 ♔f7, when White's advantage is not decisive, although the bad position of the black king and Black's defective pawn formation give White winning chances. We shall study this type of position in **Pattern**s **74** to **76**.

32...♖a8? 33.g4

Gaining space and preventing Black from setting up his ideal defensive structure, which is with the h-pawn on h5.

33...♖a7 34.♔g2 ♔e7 35.h4 g6 36.♔g3 ♔f7 37.♔f4

White continues to make progress, improving his king and gaining space with his pawns, while Black can only wait, or else enter an ending a pawn down under worse conditions than on move 32.

37...♔e7 38.f3 ♔f7 39.♖c6 ♔g7 40.♔e4

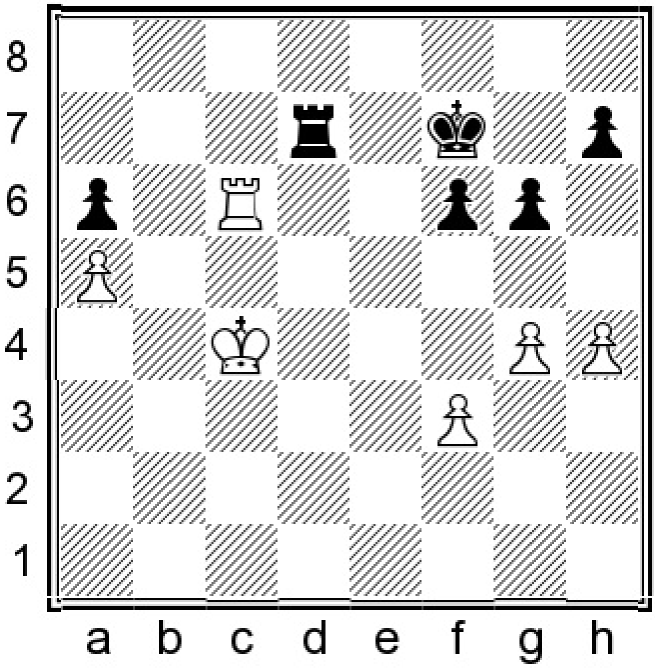
Finally the white king heads towards the a6-pawn, which will inevitably be captured. Of course, now the black rook will have new opportunities to become active, but these will be worse than on move 32.

40...♖e7+ 41.♔d4 ♖d7+ 42.♔e3?!

Indecision, which frequently occurs in the practical struggle. The side with the advantage can also have doubts regarding the best way to attack the pawn and minimise the counterplay.

It was already possible to play 42.♔c5!, since Black's counterplay is insufficient, but it required calculation: 42...♖d3 43.♖xa6 ♖xf3 44.♖d6 f5 (44...♖f4 45.♖d4 ♖f1 46.a6+–) 45.g5 ♖c3+ 46.♔b5 ♖b3+ 47.♔a4 ♖h3 48.a6 ♖xh4+ 49.♔b5 ♖h1 50.a7 ♖b1+ 51.♔c4! ♖a1 52.♖d7+ ♔f8 53.♖d8++–.

42...♖e7+ 43.♔f4 ♖a7 44.♖d6 ♔f7 45.♔e4 ♖e7+ 46.♔d4 ♖a7 47.♖c6 ♖d7+ 48.♔c4



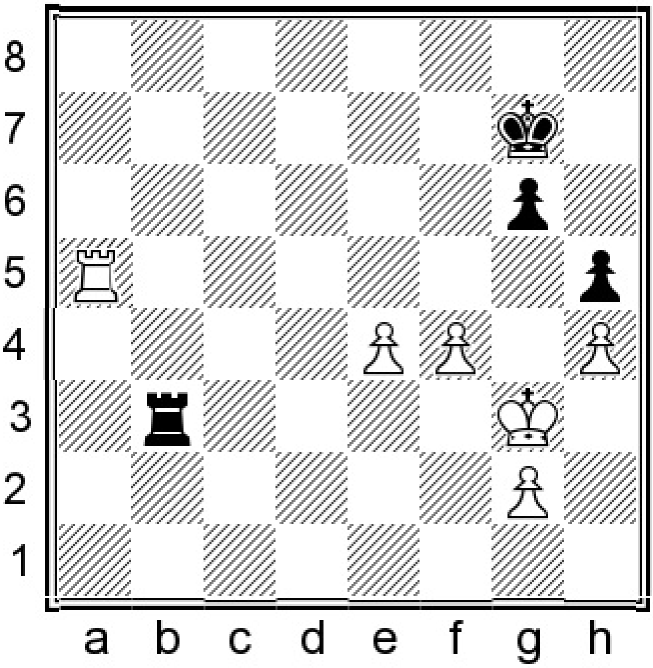
48...♖d1

Compare this diagram with the initial one. Finally Black cannot stand the tension and he sacrifices the pawn under much worse conditions than at the beginning. But if 48...♖a7?! 49.♔c5 also wins the pawn very soon. The rest of the game departs from our theme.

49.♖xa6 ♖f1 50.♖a7+ ♔e6 51.♖xh7 ♖xf3 52.a6 ♖f1 53.a7 ♖a1 54.h5 gxh5 55.gxh5 f5 56.h6 f4 57.♔d3 ♔f5 58.♖f7+ ♔g6 59.h7 1-0

As already stated, if the rook remains very passive, even the advantage of two extra pawns can be insufficient to win.

Henry Urday 2470
Alex Yermolinsky 2590
Moscow ol 1994



White to move

White is in check and one of the two possible king moves is bad.

54.♔h2?

54.♔f2, already preparing to return one of the two pawns, was the winning plan: 54...♖b2+ (54...♖b4 55.♔e3) 55.♔e3 ♖xg2 56.♖g5 ♖h2 57.f5+–.

54.♔h2? ♖b4!

Now there is only one way to defend the pawn.

55.♖e5 ♔f6

Now the white rook is in an almost comical situation, tied to the squares on the e-file, and if it moves to e8 the black king will attack it immediately. It remains to be seen what White can do with his king.

56.g3

Playing out this position as a training exercise, Ivan Salgado tried 56.g4!?, but with correct defence Black can hold: 56...♖b2+! (56...hxg4? 57.♔g3+–) 57.♔g3 ♖b3+ 58.♔f2 hxg4!=.

56...♖a4 57.♔g2 ♖a2+ 58.♔f3 ♖a3+ 59.♔f2 ♖a2+ 60.♔e3 ♖a3+ 61.♔d4

The only try.

61...♖xg3 62.f5

Or 62.♖g5 ♖f3=.

62...gxf5 63.♖xf5+ ♔g6 64.♔e5 ♖g1

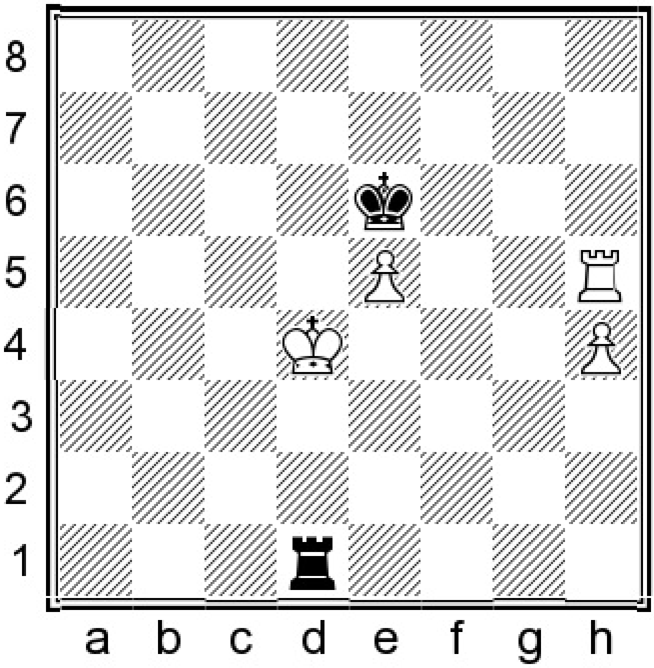
64...♖g4 65.♖f4 amounts to the same thing.

65.♖f3 ♖g2 66.♖f4 ♖g1 67.♔d4 ♖a1

The black rook will regain *distant effectiveness* (see e.g. *100 Endgames You Must Know* – **Ending 54**).

68.e5 ♖a4+ 69.♔e3 ♖a3+ 70.♔f2 ♖a2+ 71.♔e3 ♖a3+ 72.♔d2 ♖a2+ 73.♔c3 ♖a3+ 74.♔b4 ♖e3 75.♖f6+ ♔g7 76.♖f5 ♔g6 77.♖g5+ ♔f7! 78.♔c5 ♖e1 79.♖xh5 ♔e6 80.♔d4 ♖d1+ ½-½

The final position is almost ironic.



White is once more two pawns up, but his rook is back in a sad position and is not creating any problems for Black. The game was abandoned as a draw here, but might have continued something like this: 81.♔e4 ♖e1+ 82.♔f4 ♖f1+ 83.♔g3 ♖g1+ 84.♔f2 ♖h1 85.♔g2 ♖e1, followed by ...♖xe5=.

Pattern 73 Rook pushing the passed pawn

In positions with a passed pawn, when both the kings are distant, the relative position of the rooks with respect to this pawn acquires great importance.

The best position, by far, and for both players, is with the rook behind the pawn. When the stronger side achieves this, we can say that the rook *pushes the pawn*.

Here we shall present some reflections, which could have been in the form of a conclusion, but I think it is useful to read them before studying the examples. I then recommend reading them again at the end of the section.

In this situation the following factors play a role:

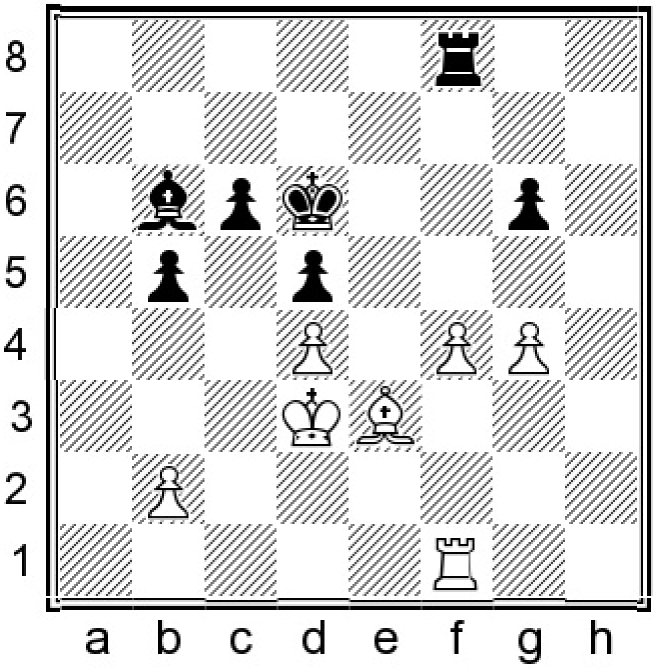
1) While the active rook is able to lose tempi, the defender's rook will suffer from a series of zugzwangs and will be forced to allow the pawn to advance further;

2) Therefore only the defender's king is left to carry out some active plan or other. Ideally the king should replace the rook in the role of blockader, in which case having the rook pushing the pawn from behind ceases to be such an advantage for the stronger side. If the defender's king cannot manage this and is unable to create counterplay in some other area of the board, then in all probability it will head towards the passed pawn in order to capture it, and here is where the third and very important factor appears;

3) If the pawn ending (following the capture of the passed pawn and the exchange of rooks) is losing, then it is more than likely that the prior rook ending was also losing. This rule is essential for taking the decision to enter this type of ending and also for deciding how to handle it.

We shall begin with a classic example.

Emanuel Lasker
Akiba Rubinstein
St Petersburg 1914 (4)



Black to move

I think that in this case it is interesting to see the moves prior to the critical position, which appears in the next diagram.

This was a dramatic game, because the outcome prevented Rubinstein from reaching the second phase of the St Petersburg tournament. Rubinstein has not experienced any problems in the whole game so far, and here is no exception, but probably he decided to speed up the drawing process.

54...c5?

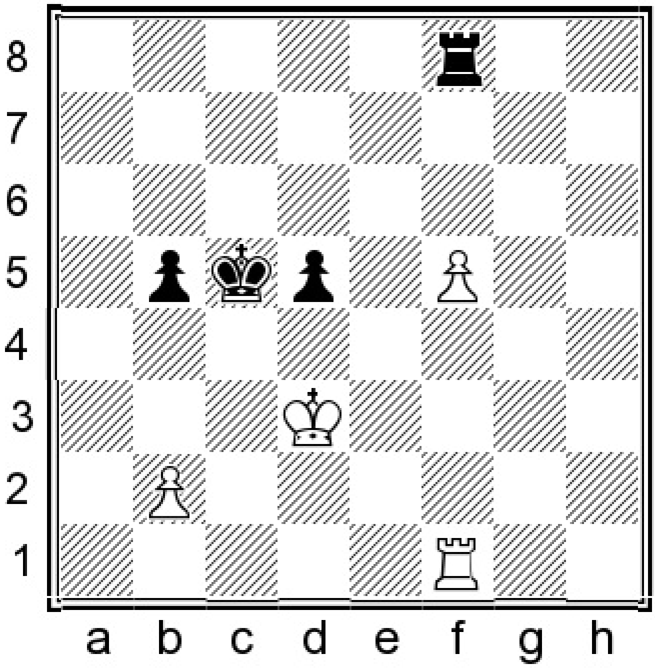
This is the losing move, as we shall see as this ending progresses.

Instead, 54...♖h8!, seizing the open file and thereby activating the rook, was one of the variations which maintained equality, e.g. 55.f5 gxf5 56.gxf5 ♔d7 57.f6 ♔e6 and everything is under control.

54...c5? 55.dxc5+ ♗xc5 56.♗xc5+ ♔xc5 57.f5!

There is no reason to wait. White sets his pawn in motion.

57...gxf5 58.gxf5



This is the most classic position on the theme we are studying. White wins, thanks to the following combination of three factors:

1) his rook is behind the passed pawn;

2) the black king cannot create counterplay;

3) the pawn ending after the capture of the f-pawn is losing for Black.

Taking into account the previous moves, we can only suppose that Rubinstein thought that this ending was a draw. If we compare this game with the next example, the clean way in which Lasker wins here is even more notable.

58...♖f6

The rook blocks the pawn and we find ourselves looking at one of the typical mechanisms of these endings. White can simply lose tempi, because each time the black rook moves, the f-pawn will be able to advance, and if the black king moves, then the white king can gain ground.

There is also a different plan for Black: bringing the king towards the passed pawn with 58...♔d6!?. This plan is more natural, although it lets the white king advance to d4: 59.♔d4 ♔e7 (if 59...♖f6 then 60.♖f2 leads to zugzwang; or if 59...♖h8? then Black is not in time to initiate this counterplay: 60.f6 ♖h4+ 61.♔c3 ♖h3+ 62.♔b4 ♖h8 63.f7 ♖f8 64.♔xb5+–) 60.♖e1+! (60.♔xd5 ♖c8!) 60...♔f6 61.♖e5 b4 (61...♖h8 62.♖xd5 ♖h2 63.♖xb5+–) 62.♖xd5 ♖h8 63.b3 and the second pawn falls.

Finally, the plan of counterattack with 58...♔b4?! is harmless here, because the white rook can comfortably defend the b2-pawn: 59.♔d4 ♔b3 60.♖f2 b4 61.f6 ♖f7 62.♔xd5+–.

59.♖f4! b4

There is nothing better; everything loses now. We shall consider three tries:

A) 59...d4 (with the idea of ...♔d5) 60.♔e4! ♖d6!. This counterplay attempt would require White to count the tempi precisely: 61.♖f3! ♔c4 62.f6 d3 63.f7 d2 64.f8=♕ d1=♕ 65.♕c8++–;

B) 59...♔d6?! allows the king to advance: 60.♔d4 ♖f7 61.f6 ♔e6 62.♖f1+–;

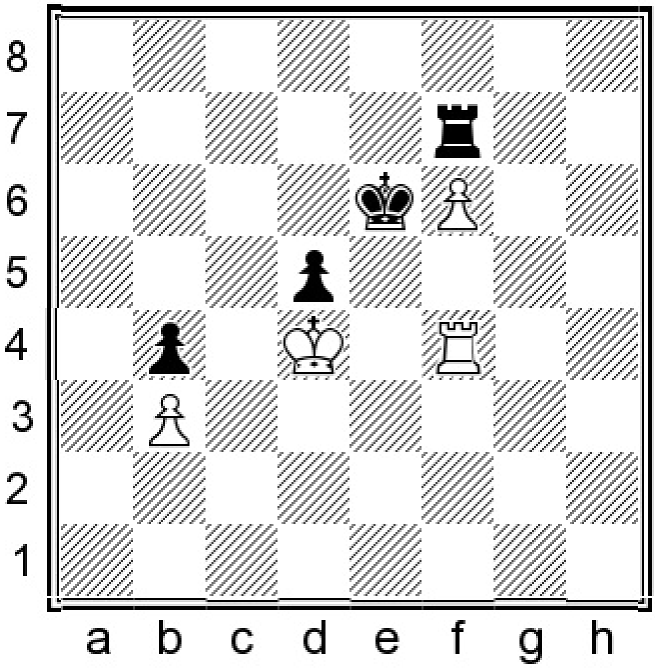
C) 59...♖f8?! allows the pawn to advance: 60.f6+–.

60.b3! ♖f7

A) 60...♔c6?! 61.♔d4 ♔d6 62.♖f3! is again zugzwang: 62...♖h6 63.f6 ♖h4+ 64.♔e3 (64.♔d3 is equivalent) 64...♖h8 65.f7 ♖f8 66.♔d4+–;

B) 60...d4!? has the same problem as before: 61.♔e4 ♖d6 62.f6! d3 63.f7 d2 64.f8=♕ d1=♕ 65.♖f5+ ♔b6 66.♕b8++–.

61.f6 ♔d6 62.♔d4 ♔e6



The moment has arrived when checking the possible pawn endings is essential. If all the possible pawn endings are winning for White, then Black can never capture the f-pawn and will be forced to wait for White to find the decisive manoeuvre, which normally comprises either forcing the exchange of rooks or else exploiting this situation to win a pawn on the other wing.

63.♖f2!

Another zugzwang. Instead, 63.♔c5? ♖c7+ 64.♔xb4 ♔f7 would have been considerably more awkward, and according to the Lomonosov tablebases it is a draw.

63...♔d6 64.♖a2! ♖c7

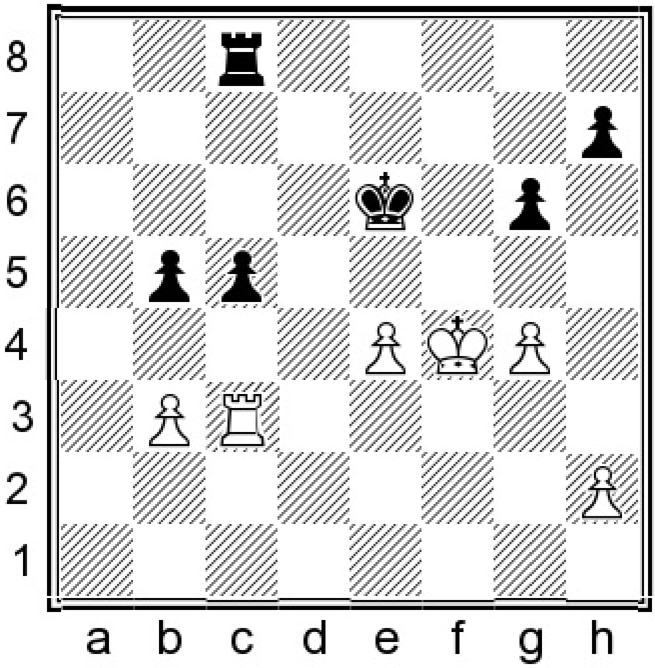
Or 64...♖xf6 65.♖a6+ ♔e7 66.♖xf6 ♔xf6 67.♔xd5 ♔e7 68.♔c5 ♔d7 69.♔xb4+–.

65.♖a6+ ♔d7 66.♖b6! ♖c3 67.♖xb4 ♖f3 68.♔e5 ♖f1 69.♖f4! ♖xf4 70.♔xf4 ♔e6 71.f7 ♔xf7 72.♔e5

Black resigned.

Seeing this example, everything seems perfect. However, in the next example doubts will start to creep in.

Mikhail Botvinnik
Max Euwe
Groningen 1946 (9)



Black to move

A position almost identical to the famous Lasker-Rubinstein game. The difference is in the presence of the h-pawns, which seems to change the evaluation of the position to a draw. We shall compare the variations in order to examine the differences:

37...c4 38.bxc4 bxc4

Of course if 38...♖xc4 then 39.♖a3!, activating the rook.

39.h4!

With the idea of closing the kingside. It is very interesting to check that 39.h3? loses to 39...♖c5 40.h4 h6 and White would essentially be in the Lasker-Rubinstein position: 41.e5 ♔d5 42.♖e3 c3 43.e6 c2 44.e7 c1=♕ 45.e8=♕ ♖c4+–+.

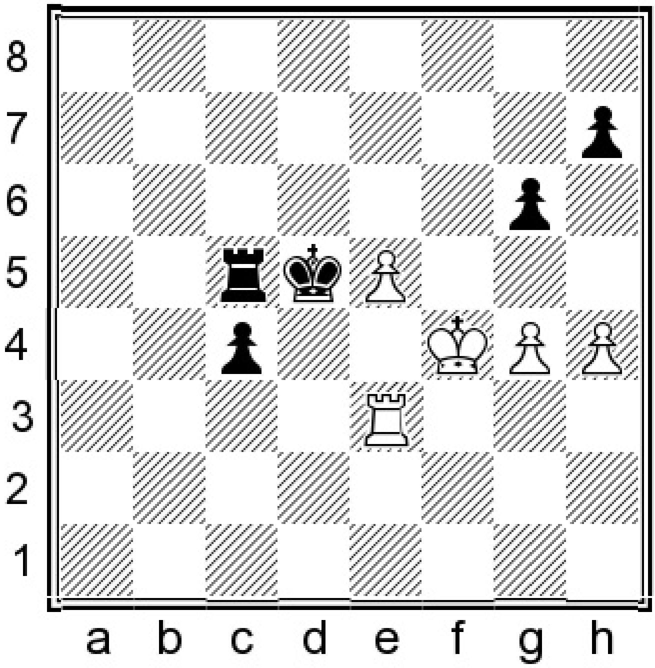
39...h6

The study of chess through the medium of patterns (which in fact is what this book proposes and is a widely recognised method) can sometimes create mistaken intuitive feelings. Most players who have studied the previous example are likely to think that this position is winning for Black. The similarity is extraordinary, but the differences are important enough to force us to check it by means of analysis, which will show us that this is not the case.

Once we have established that the position is a draw, it is essential to clarify exactly what is the difference between the two positions. For this we are going to analyse two important alternatives:

A) 39...♖c5 is the move similar to the previous example, but there follows 40.e5! ♔d5 (or 40...♖c8

41.h5 ♔d5 42.hxg6 hxg6 43.♔g5 and the white king creates counterplay) 41.♖e3! and now although we shall analyse three moves, it seems that none of these win:



analysis diagram

A1) 41...c3 42.e6 c2 43.e7 ♖c8 (43...c1=♕ 44.e8=♕= and with the g5-square available, the white king escapes – this can be considered quite fortuitous) 44.♖e1 ♔d6 45.♔g5 ♔d7 46.♖c1 ♔xe7 47.♔h6=;

A2) 41...♖c8! 42.e6! c3 43.e7 c2 44.♖e1 ♔d6 and once again the square g5 is decisive: 45.♔g5!=;

A3) 41...♖c6! 42.h5!. This is a position where the black pieces are all on their ideal squares and cannot be improved: 42...♔e6! 43.hxg6 hxg6 44.♖c3 ♖c5 45.♔g5= and once again the king gains counterplay via g5.

B) 39...♖c6 was slightly more promising: 40.e5! ♔d5 41.♖e3 ♖e6! (41...c3 42.e6 c2 43.e7 ♖c8 44.♖e1 ♔d6 45.♔g5 ♔d7 46.e8=♕+ ♖xe8 47.♖c1 ♖e2 48.♔h6=) 42.h5! ♖c6 43.hxg6 hxg6 44.♔g5 ♔d4 45.♖e1 ♖e6 (if 45...c3? 46.e6 White even wins) 46.♔f4! (bodycheck) 46...c3 47.♖d1+ ♔c4 48.♔e4! c2 49.♖c1 ♔c3 50.♔d5 (White begins counterplay with his king and saves himself by a whisker) 50...♖e8 51.e6 ♔d2 52.♖g1! c1=♕ 53.♖xc1 ♔xc1 54.♔e5 ♔d2 55.♔f6 ♔e3 56.♔xg6! ♖xe6+ 57.♔f5 ♖e8 58.g5=.

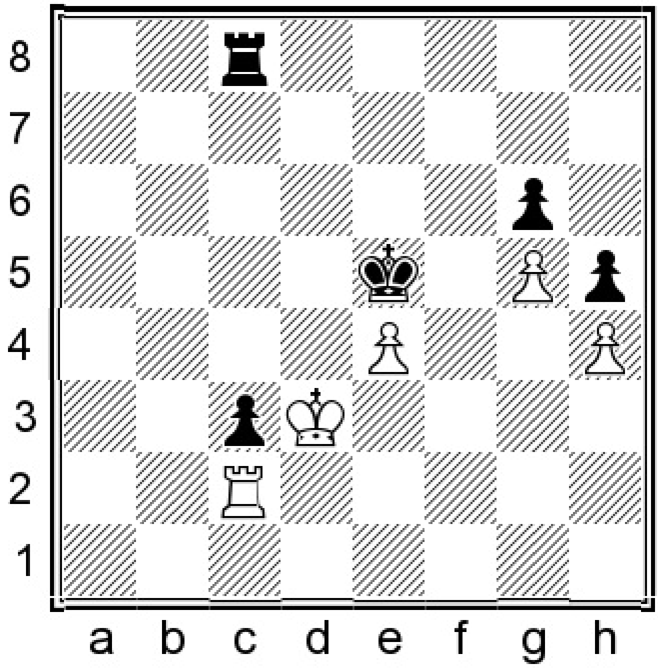
40.g5!

The key move. If it were Black to move then with 40.-- 40...♖c5 his position would be winning, e.g. 41.g5 hxg5+! 42.hxg5+–.

40...h5

Or 40...hxg5+ 41.♔xg5!.

41.♔e3 ♔e5 42.♖c2! c3 43.♔d3!



We have reached the most important moment. The key point is that the pawn ending is a draw and that is precisely the difference between this ending and the previous one.

43...♖d8+

43...♖c7 44.♖xc3! ♖xc3+ 45.♔xc3 ♔xe4 46.♔c4 ♔f4 47.♔d4 ♔g4 48.♔e5 ♔xh4 49.♔f6! ♔g4 50.♔xg6 h4 51.♔f6 h3 52.g6 h2 53.g7 h1=♕ 54.g8=♕+=.

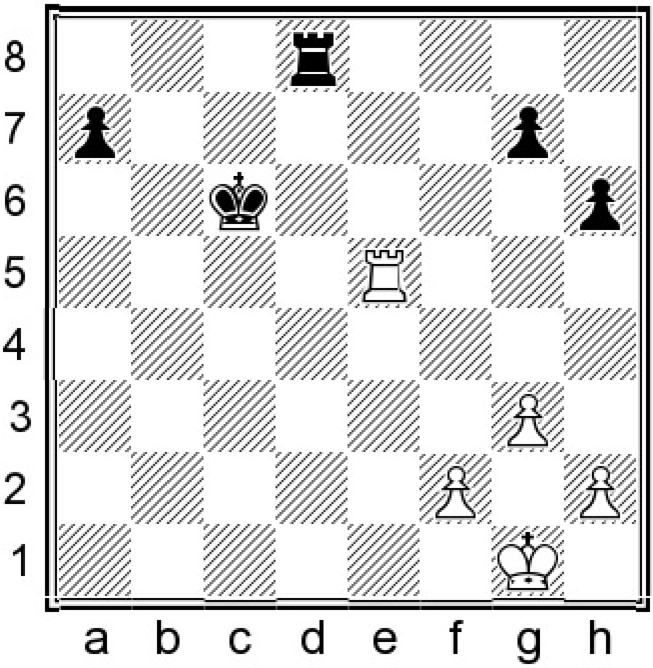
44.♔e3 ♖d4 45.♖xc3 ♖xe4+ 46.♔f3 ♖xh4 47.♖c6! ♖f4+

If 47...♔f5, 48.♖c5+! ♔e6 49.♖c6+ draws.

48.♔e3 ♖e4+ 49.♔f3 ♔f5 50.♖f6+ ♔xg5 51.♖xg6+

With a draw.

Garry Kasparov
Anatoly Karpov
Moscow WCh 1984 (m/6)



Black to move

42...♖a8?!

Black places his rook behind the passed pawn, and from here onwards White's defence becomes delicate. Objectively, this is not the strongest move, but the game continuation is very instructive. Furthermore I think that by comparing this with the other possible plans we can arrive at a better evaluation of this method. The defending side can count on only two effective plans: capturing the pawn or changing the blockader.

The best move is 42...♖d5!, the advantage of which is that it leaves the white king cut off, and we shall study this in the section 'King cut off from the passed pawn' (**Pattern 78**), for reasons of clarity.

42...♖a8?! 43.♖a5!

The best defence. All other moves lose easily:

43.♖e6+?! goes pawn-hunting: 43...♔c5 44.♖g6 a5 45.♖xg7 a4 and now the rook behind the a-pawn transforms it into an irresistible force: 46.♖c7+ ♔b4 47.♖b7+ ♔a5!? (other moves also win, but we shall see this mechanism for terminating the checks while maintaining the black rook supporting the pawn several times in this example) 48.g4 a3 49.♖b1 a2 50.♖a1 ♔b4! (now the king goes to complete this part of the plan) 51.f4 ♔b3 52.♔f2 ♔b2 53.♖xa2+ ♖xa2 54.♔e3 ♔c3 55.h4 ♖h2 56.h5 ♖h4 57.g5 ♖xh5 58.g6 ♖h4! 59.f5 ♖g4–+.

43...♔b6

Now White has to retreat the rook: on a1 it is further out of range of attacks by the black king, but on a2 it stops the pawn one square further back.

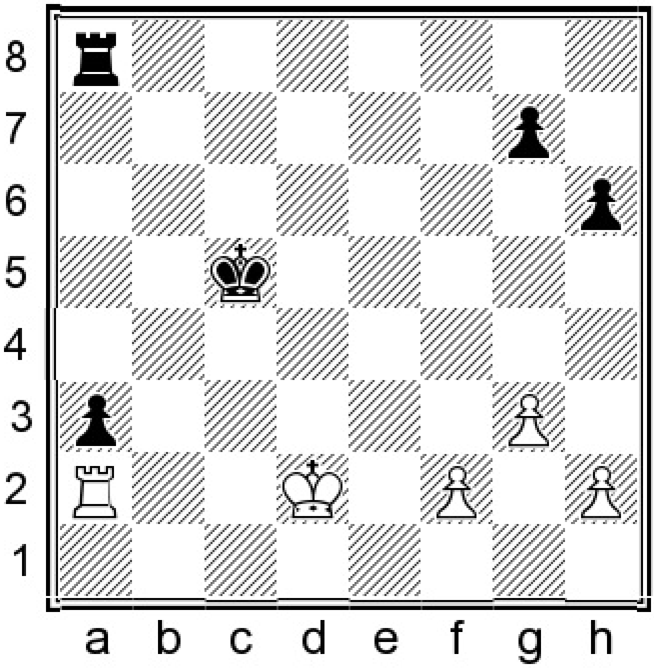
44.♖a2!? a5 45.♔f1 a4

45...♖e8!?, cutting off the white king, is another interesting plan.

46.♔e2 ♔c5 47.♔d2

47.♔d3 is of similar worth, if White continues with the plan that we consider the correct one: 47...a3 48.♔c3 ♖a7 (transferring the decision to the white king, trying for zugzwang) 49.♔b3! (opting for the change of blockader; 49.h4?! weakens the pawns and Black can continue with 49...♔d5 50.♔d3 ♖a6! – a new zugzwang attempt, and with each one White's resistance continues to weaken) 49...♔d4 50.♖d2+ ♔e4 51.♔a2 ♔f3 52.♖c2, reaching a position similar to the one we are going to study further on.

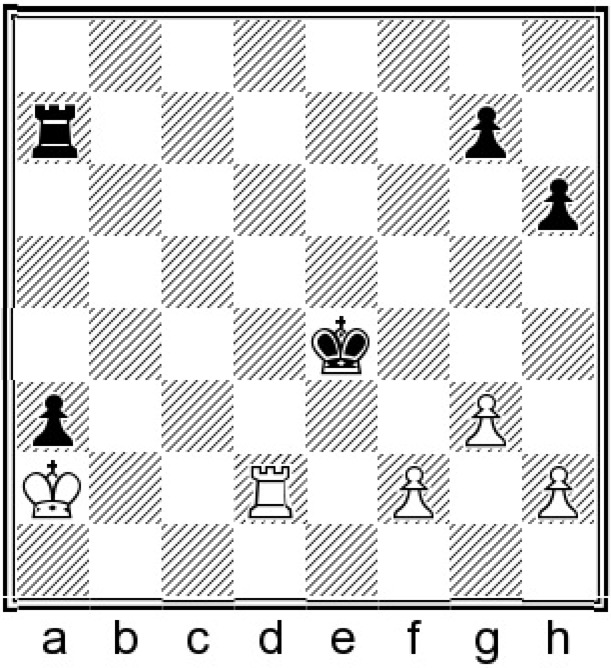
47...a3



Another critical position.

48.♔c1?!

It is difficult to understand why White gives ground to the black king. It was more logical to play 48.♔c3! ♖a7 (always the same mechanism to try for zugzwang; 48...g5 49.f3 ♖f8 50.f4!=) 49.♔b3! (intending to give check with the rook and blockade with the king) 49...♔d4 50.♖d2+ ♔e4 51.♔a2!.



analysis diagram

White has managed to complete the change of blockader and despite his king being distant, the rook seems adequate to defend the kingside: 51...♔f3 52.♖c2 (waiting for the black pawns to move before becoming active) 52...g5 (52...♔g2 53.f4+ ♔h3 54.♖f2 (intending f5-f6) 53.♖c6!, with enough counterplay to draw.

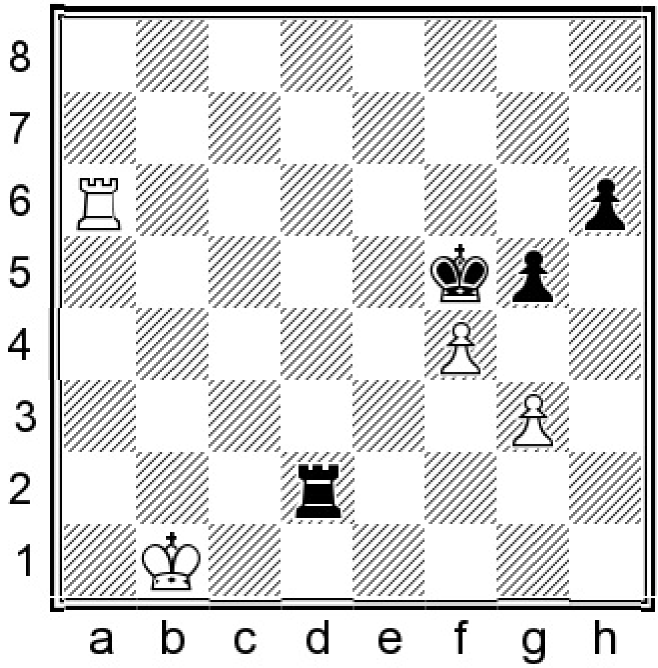
48...♔d4 49.f4?

This is really the decisive mistake. 49.♔b1 ♔e4! (49...♖b8+ looks dangerous but after 50.♔a1 ♖b2 51.♖xa3 ♖xf2 52.h4 White holds) 50.♖c2 ♔f3 51.♔a2 ♖a7 52.♖d2! leads to a position we have analysed in the 48.♔c3! variation.

49...♔e4 50.♔b1 ♖b8+ 51.♔a1 ♖b2 52.♖xa3 ♖xh2 53.♔b1 ♖d2!

Cutting off the white king.

54.♖a6 ♔f5! 55.♖a7 g5 56.♖a6



56...g4!?

Very simple and elegant, although other moves also win.

57.♖xh6 ♖g2 58.♖h5+

58.♔c1 ♖xg3 59.♔d2 ♖f3 60.♔e2 ♔xf4! 61.♖f6+ ♔g3 also wins for Black.

58...♔e4 59.f5 ♖f2! 60.♔c1 ♔f3 61.♔d1 ♔xg3 62.♔e1 ♔g2 63.♖g5 g3 64.♖h5

If 64.♔d1, 64...♔h3! 65.♔e1 ♔h4 wins as well.

64...♖f4 65.♔e2 ♖e4+ 66.♔d3 ♔f3 67.♖h1 g2 68.♖h3+ ♔g4 69.♖h8 ♖f4 70.♔e2 ♖xf5

White resigned.

Pattern 74 A rook trapped in front of a pawn on the seventh

We shall begin with a series of three patterns with much longer sections than the majority of the ones presented in this book. The reason is twofold: they arise very frequently and their analysis is very complex.

The topic is the type of position where a rook is situated in front of its own passed pawn; this is much more common than when the rook is behind the pawn.

We shall start with the situation in which the pawn has advanced to the seventh rank, leaving the rook completely trapped. We shall then be able to study positions with the pawn further back and gain a better understanding of whether we should advance the pawn to the seventh or not.

We generally become familiar with this pattern right from our stage as beginners, because it arises in very basic theoretical positions. But it also occurs in positions with many pawns and very differing degrees of complexity, from the most basic to the extremely intricate. Before embarking on our study of them I think it would be useful to revise the theoretical positions (see *100 Endgames You Must Know*, **Ending**s **65**, **66** and **75**).

Once the pawn has advanced to the seventh rank, the rook which is in front of it has great difficulty getting out, but there are a few mechanisms for achieving this. We shall identify and classify four of these and we shall look at examples of each one:

1) the rook makes a violent escape;

2) another passed pawn advances;

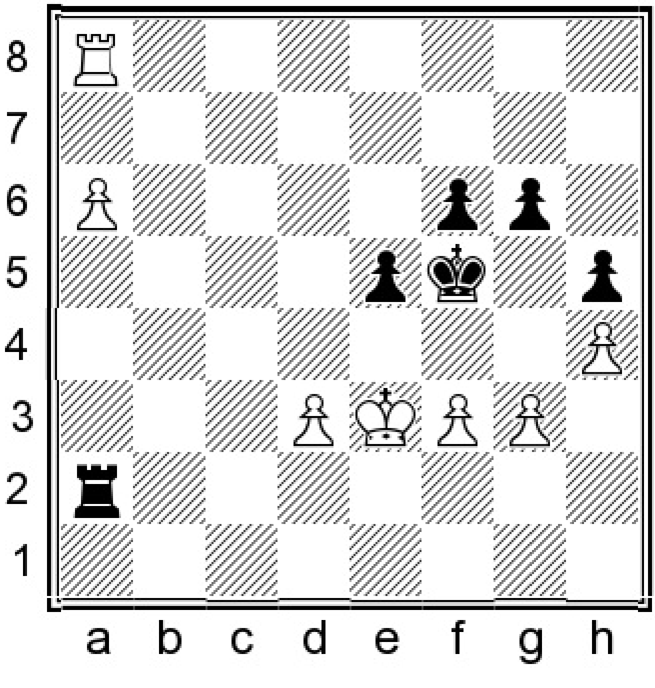
3) another weakness is attacked;

4) the attacker simplifies to a pawn ending.

If the attacker is unable to exploit one of these four, the position is harmless and cannot be won, even if the pawn on the seventh is an extra pawn.

Let us begin with a few examples of the first method which is usually settled very quickly. The violent escape of the rook almost always involves a check or a skewer, and both of these resources will be neutralised if the defender's king is situated in the *safe zone* (the squares g7/h7 in the case of a pawn on a7). If the king is unable to reach one of these squares, it must be kept hidden behind a pawn, but this shelter can turn out to be weak.

Pablo Glavina 2461
Josep Oms Pallise 2490
Zaragoza 2010 (9)



White to move

The most flexible position for the stronger side is with the pawn on the sixth rank; then the rook is not completely stuck, the king can hide away on a7 and the option to advance the pawn remains open. In this particular case White can advance the a-pawn to the seventh rank with confidence, because he has prepared a *violent escape* for his rook:

35.a7! ♖a1 36.g4+! hxg4 37.fxg4+ ♔xg4 38.h5

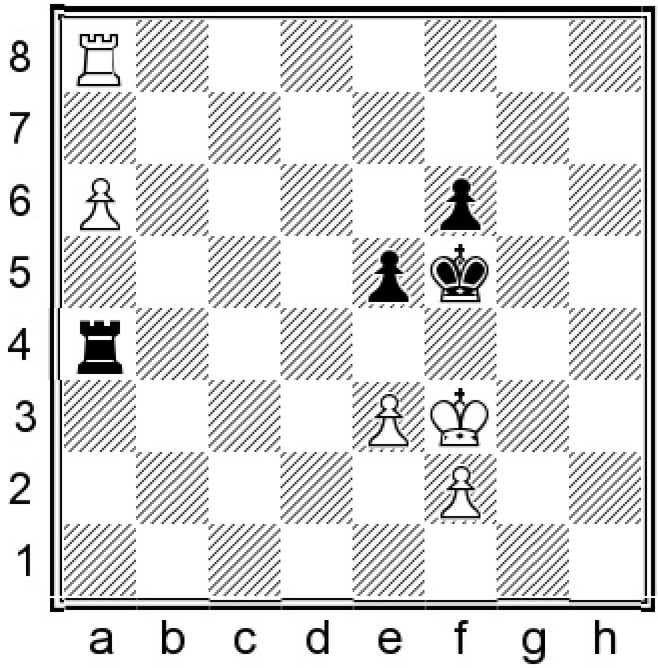
Black resigned.

Whether he captures with the king or with the pawn, the white rook emerges with check and the pawn queens.

The defender should foresee the consequences of the advance of the pawn to the seventh and prepare against it.

In the following case Black can choose between three plans, but he chooses the worst.

Alexander Riazantsev 2629
Semen Dvoirys 2534
Cheliabinsk 2007 (9)



Black to move

42...e4+?

Black has mis-assessed the position with the pawn on the seventh. Still, the mistake is a very logical one. The two plans which maintain equality both look suspect. We shall consider them carefully:

A) 42...♔g6, to bring the king to the safe zone g7/h7, in anticipation of the advance of the white pawn to a7. This allows White two plans. One is to bring the king gradually to a7, which would force Black to be vigilant regarding counterplay with his king, i.e. returning it to f5. The other plan is to advance the pawn to a7 and infiltrate with the king via f5-e6, but this is harmless, because the black king has no need to move from g7 and in this structure there is no way to exchange the rooks into a winning pawn ending;

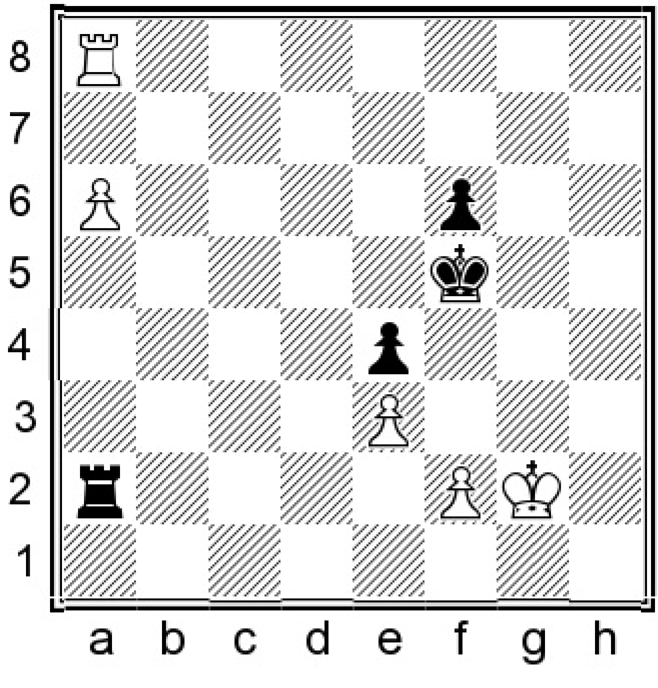
B) Waiting, with 42...♖a1 for example, allowing 43.a7, when it is essential to defend by pinning the pawns with 43...♖a3! 44.♔g2 ♖a2 45.♔g3 and now the only move is 45...♔e4! – totally safe, but strange for a human to calculate.

42...e4+? 43.♔g3 ♖a1 44.♔g2?

It was already possible to play 44.f3! and the black king's refuge on f5 would be permanently compromised: 44...exf3 45.a7! (45.♔xf3 would give the black king time to transfer to the safe zone g7/h7) 45...♖a4 46.e4+!.

44...♖a2?

Black fails to grasp the chance to transfer his king to the safe zone with 44...♔g6 45.a7 ♔h7 46.♔g3 ♖a2 47.♔f4 ♖xf2+ 48.♔xe4 ♖a2=.



45.a7!

Finally White understands the position as a whole and starts the winning manoeuvre. As a final piece of information to reflect upon, the same position arose in another game and White failed to find the winning idea: 45.♔g3 ♖a1 46.f3! ♖a3 47.♖e8?? (47.a7!+–) 47...♖xa6 48.♖xe4, Voss-Stegemann, Germany tt 2004, and the game ended in a draw.

45...♖a1 46.f3!

It all revolves round the fact that the black king's barricade is not solid enough and it will soon be forced out into open terrain.

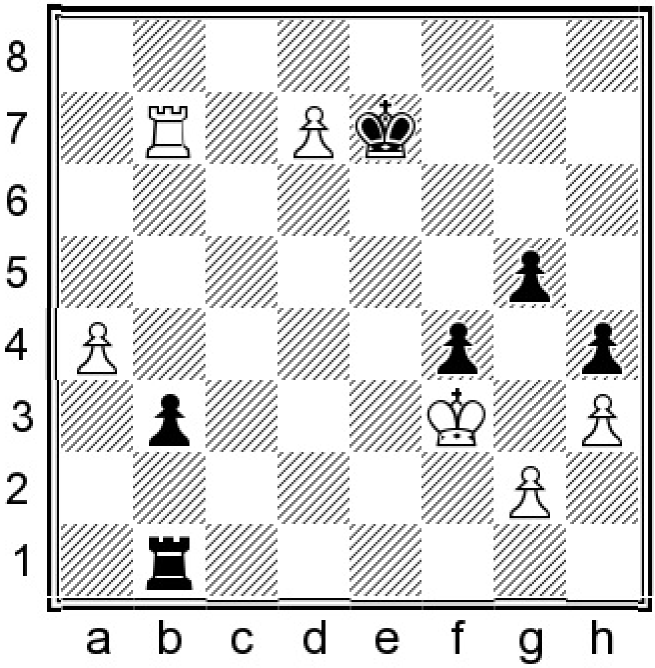
46...exf3+ 47.♔xf3 ♖f1+ 48.♔g2 ♖a1 49.♔f2

49.e4+? would be premature: 49...♔f4 50.e5 ♖a2+ 51.♔f1 (51.♔g1 ♖a1+ 52.♔h2 ♖a2+ 53.♔h3 ♖a3+ 54.♔h4 ♖a2, exploiting the theme of **Pattern 70** – King on the edge) 51...♔f3 52.♔e1 ♔e3 53.♔d1 fxe5, and the black king remains sheltered from checks.

49...♖a4 50.♔f3 ♖a3 51.♔e2 ♖a1 52.e4+! ♔f4 53.e5! ♖a2+ 54.♔d1 ♖a1+ 55.♔c2

Black resigned.

Roman Bordell
Jesus de la Villa
Sitges 1990



White to move

White has two passed pawns and his rook stands behind the only black passed pawn. But White's king will be unable to find shelter from checks and Black's manoeuvre to bring the b-pawn to the seventh rank and then extract the rook from b1 with check will prove unpreventable, producing some very attractive variations:

53.♔g4

The white king tries to hide.

A) 53.a5 is too slow: 53...b2 54.♔f2 (54.a6 ♖f1+ 55.♔e2 b1=♕) 54...g4! 55.hxg4 h3! 56.gxh3 ♖h1 57.♖xb2 ♖h2+–+;

B) 53.♔e2 loses to 53...b2 54.♔d3 ♖d1+ 55.♔c2 b1=♕+ 56.♖xb1 ♖xb1 57.♔xb1 g4 and one of the black pawns queens.

53.♔g4 b2

With the threat of 54...f3.

54.♔h5

The white king is hidden away even further now, but his barricade proves to be insufficiently robust:

54...g4!

And Black either creates a passed pawn or gives check to the white king, e.g.:

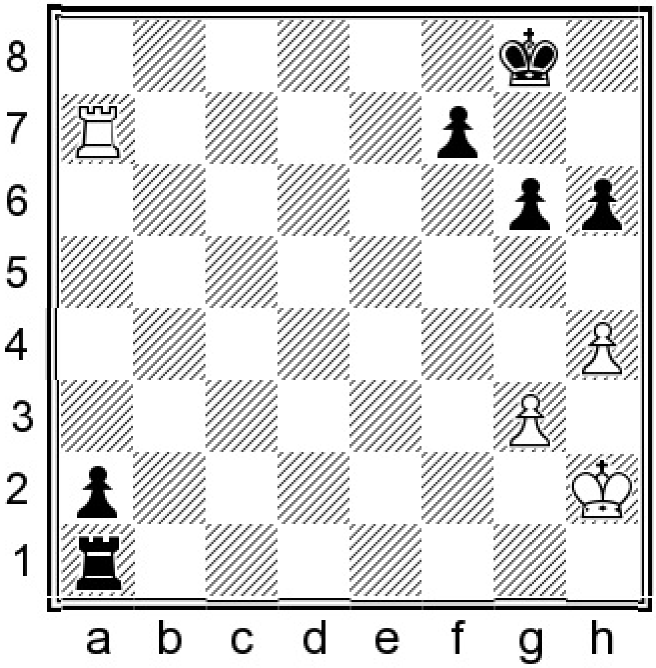
A) 55.♖b3 was played in the game and is analysed in the section on Vancura (**Pattern 77**);

B) 55.♔xg4 f3 56.gxf3 (56.♔xf3 ♖f1+) 56...♖g1+–+;

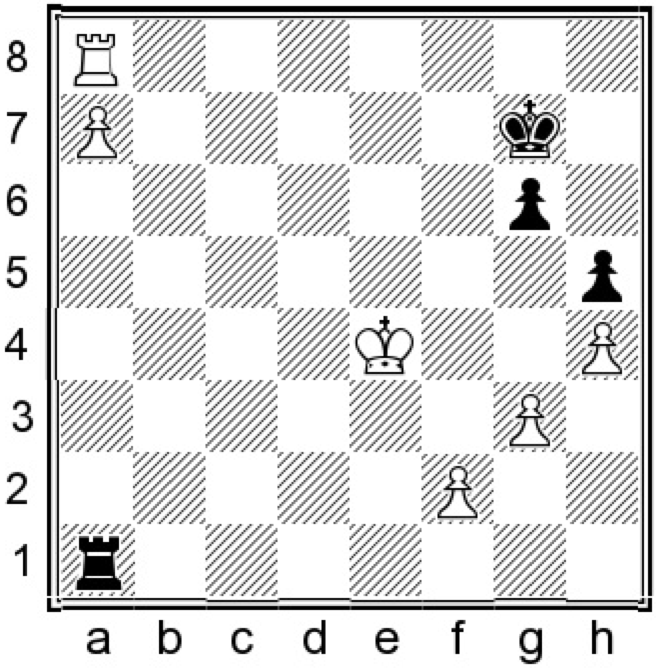
C) 55.hxg4 f3 56.gxf3 h3–+.

The creation of a second passed pawn would seem to be the simplest mechanism but this also has its subtleties. It is important to remember that if the defender's king has reached the safe zone, a passed rook's or knight's pawn is not sufficient to win, so it must be created on another file. A special structure with 3 vs 2 on the opposite wing to the pawn on the seventh has given rise to many unexpected draws and from this we can learn almost all the important details.

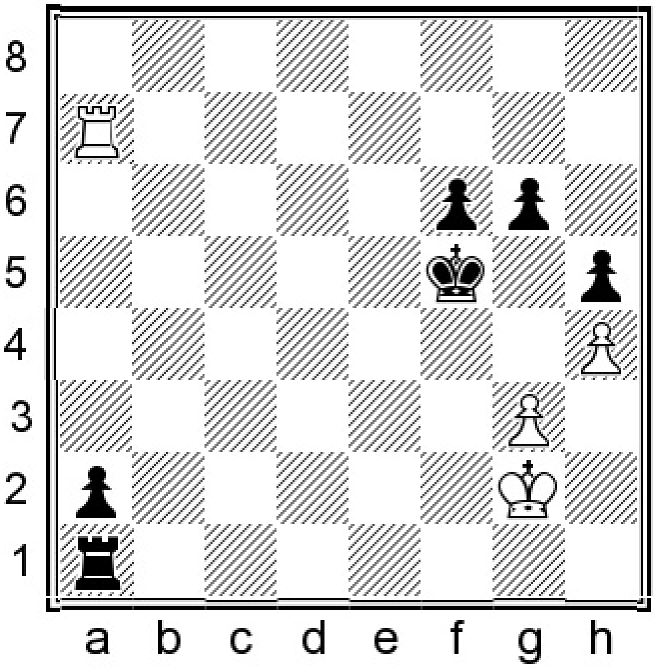
Series: Creating the passed pawn



Position 1



Position 2



Position 3

In these three positions, all quite similar and all arising in practical games, one of the players has an extra pawn on the seventh rank, trapping his rook, and in addition a majority of 3 vs 2 on the other wing. The attacker needs to create a second passed pawn, but the difficulty is that this is not enough to create just any passed pawn; the rook's and knight's pawns are useless, so it has be on the f-file.

The first position is winning; Black carefully creates a passed pawn on the f-file: **40.♔g2 f5 41.♔h2 g5 42.hxg5 hxg5 43.♖a5 ♔h7 44.♔g2 f4 45.♖a3 f3+ 46.♖xf3 ♖b1 0-1** Dewi-Munguntuul, Tashkent 2016.

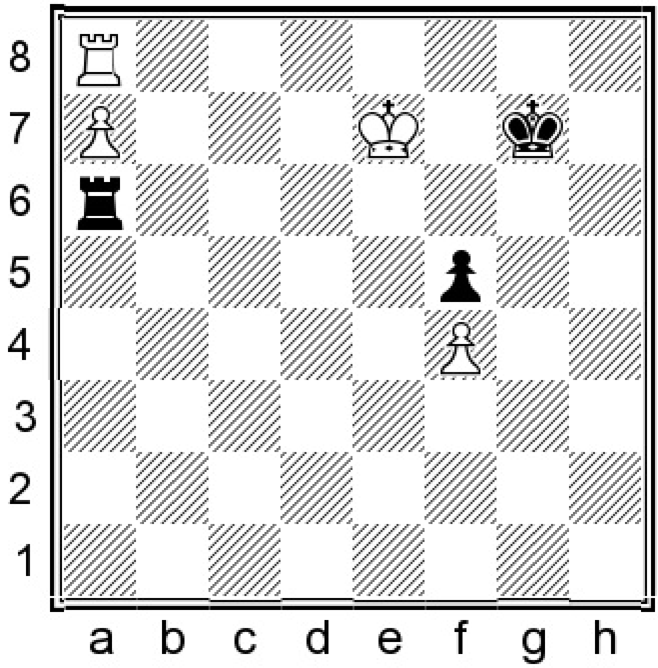
The second position is a draw, because it is not possible to create a passed pawn on the bishop's file. This should alert us against advancing the h-pawn to h4 in positions which can end up like this one. Black can easily defend, because White is unable to create a passed pawn on the f-file, and the attempt to exchange rooks to reach a winning pawn ending is easily thwarted: **48...♖a4+ 49.♔f3 ♖a3+ 50.♔g2 ♖a2 51.♔h3 ♖a3 52.f3 ♔h7 53.♔g2 ♖a2+ 54.♔f1 ♖a1+ 55.♔e2 ♖a2+ 56.♔d3 ♔g7 57.♔c4 ♖a1 58.♔c5 ♖c1+ 59.♔d6 ♖d1+!** One of those moments when it is essential to be attentive; 59...♖a1? loses to 60.♖c8! (not 60.♖d8? ♖a6+!) 60...♖a6+ 61.♖c6 ♖xa7 62.♖c7+ ♖xc7 63.♔xc7, with a winning pawn ending. **60.♔e5 ♖a1 61.♔f4 ♖a4+ 62.♔e5 ♖a1 63.f4 ♖a2 64.f5 gxf5 65.♔f4 ♖a5 66.♖e8 ♖xa7 67.♔xf5 ♖f7+ 68.♔e4 ♖f1 69.♖e5 ♔g6 ½-½** Aronian-Morozevich, World Championship Tournament, Mexico City 2007.

The third position is also a draw, but at this precise moment White must give check to prevent an ingenious resource to create a passed pawn on the f-file: **65.♖a8?** It was essential to give at least one check: 65.♖a5+! ♔e4 66.♖a8 g5 67.hxg5 and here it is necessary to recapture the pawn with 67...fxg5, but now there is no way to make a passed pawn on the f-file.

65.♖a8? g5! 66.♖a5+ If 66.hxg5 ♔xg5!, as in the game. **66...♔g6 67.hxg5 f5! 68.♖a6+ ♔xg5 69.♖a4 h4! 70.gxh4+ ♔h5 71.♖a8 ♔xh4 72.♖a7 f4 73.♖a8 ♔g5 74.♖a7 f3+ 0-1** Lamas-Antoli, Aragon Team Championship 2009.

We move on to the third mechanism, which can only be applied if a weakness already exists, or can be created. The most typical situation is with a pawn blocked on the f-file:

Various games



White to move

With the bishop's pawn on f5 Black loses. With the pawn blocked on any other square it is a draw.

The pawn is a second weakness and on f5 it cannot be defended. The application of the mechanism of zugzwang is quite simple:

1.♔d7! ♔h7 2.♔c7 ♖a1 3.♔d6 ♖a5 4.♔e7 ♔g7 5.♔e6!

Zugzwang; either the rook gives up the defence of the pawn, or the king moves away.

5...♔h7 6.♔f6

A new zugzwang and Black resigned in Solodovnichnekoi-S.Kasparov, Milan 2008, but in other games play continued:

6...♖a6+

6...♖a1 7.♔xf5 (1-0 Degerhammar-Andersen, cr 2008) 7...♔g7 8.♔g5 ♖g1+ 9.♔h4 ♖a1 10.f5 ♖h1+

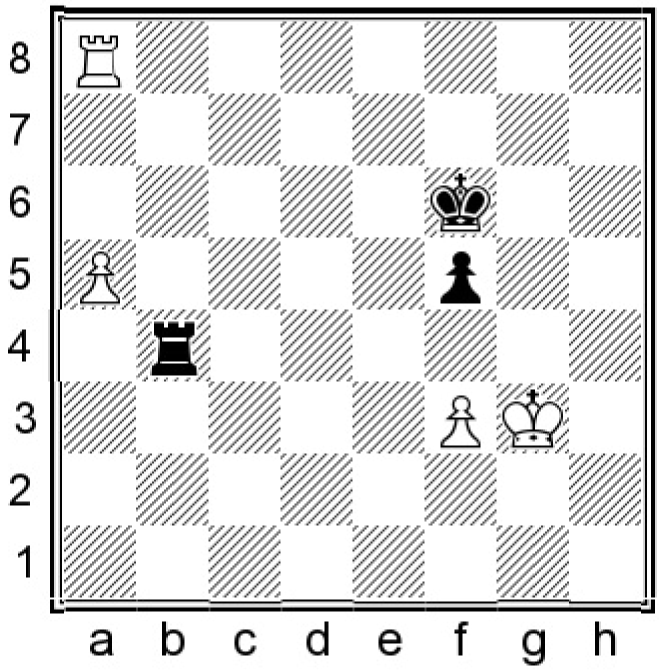
11.♔g3 ♖g1+ 12.♔h2 ♖a1 13.f6+ 1-0 Hochstrasser-Papa, Switzerland tt 2012.

7.♔xf5 ♔g7 8.♔e5 ♖a5+ 9.♔e6 ♖a2 10.f5 ♖a1 11.f6+ ♔h7 12.f7 ♖e1+ 13.♔d5 ♖d1+ 14.♔e4 ♖e1+ 15.♔d3 1-0

Borsuk-Tsifanskaya, Ramat Aviv 2004.

In the next example, Black had the chance to avoid the losing position, but was possibly unaware of the mechanism.

Klaus Opl 2360
Michael Gerhold 2237
Vienna ch-AUT 2010 (9)



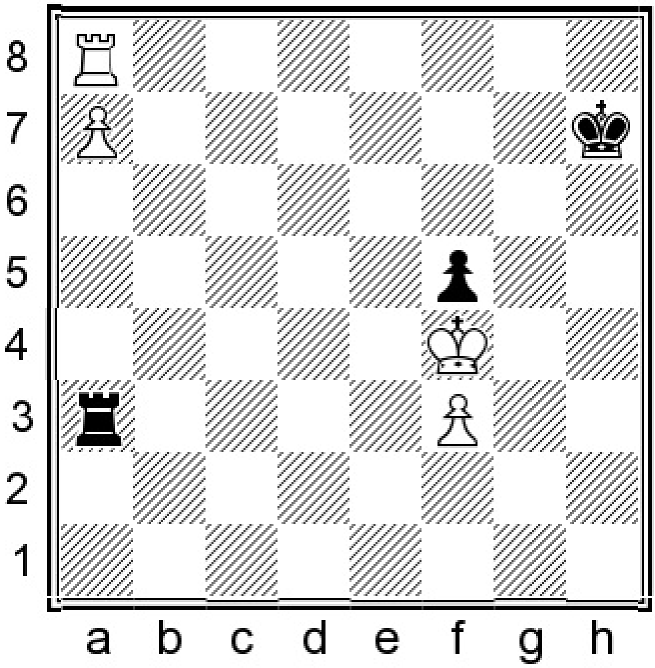
Black to move

51...♖a4?

This allows White to create the winning weakness.

51...f4+? is premature because it allows the white king to seize a dominant position: 52.♔g4 ♖a4 53.♖a6+! ♔g7 54.♔g5 ♔f7 55.♖a7+ ♔f8 (55...♔e6 56.a6+–) 56.a6 ♔g8 57.♔g6 ♔f8 58.♖a8+ ♔e7 59.a7+–.

51...♖b3! is the only move which prevents both f3-f4 and the advance of the king: 52.a6 (if 52.♔f4 ♖b4+ and the king has to retreat) 52...♖a3 53.a7 ♔g7 54.♔f4 (54.♔f2 f4 reaches the drawn position) 54...♔h7!.



analysis diagram

If White’s king captures the pawn then the rook will take the one on f3 with check, so he tries to manoeuvre: 55.♔e5 (55.♔g5 ♖a5 56.f4! ♔g7 leads to a position of reciprocal zugzwang. Now the white king cannot go via f6 but if it heads back the black rook will prevent it from completing its journey: 57.♔h4 ♖a3!) 55...♖a5+ 56.♔e6 f4!, reaching the drawn position, because the f4-pawn can be defended with the rook and it is not possible to place the black king in zugzwang.

51...♖a4? 52.a6?

White squanders his first opportunity: 52.f4!+−.

52...♔g6?

52...f4+ 53.♔g4 ♔g6=.

53.a7?

53.f4!+–

53...♔g7?

53...f4+=.

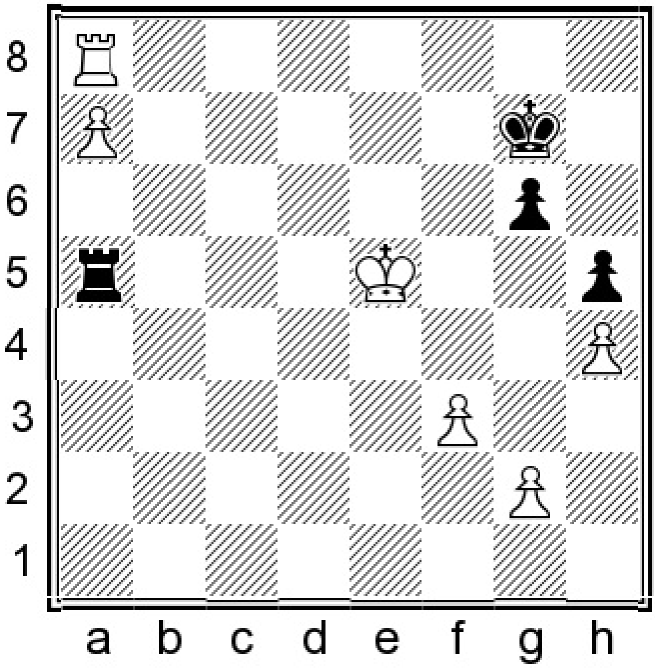
54.♔f2? f4!

Finally Black realises that this is the drawing set-up.

55.♔e2 ♔h7 56.♔d3 ♔g7 57.♔c3 ♖a1 58.♔c4 ♖a4+ 59.♔c5 ♖a1 60.♔d5 ♖a5+ 61.♔e4 ♖a4+ 62.♔e5 ♔h7 63.♔f5 ♔g7 64.♔g5 ♔h7 65.♖f8 ♖xa7 66.♖xf4 ♔g7 67.♖f5 ♖a1 68.♖b5 ♔f7 69.f4 ♖a6 70.♖b7+ ♔f8 71.f5 ♖c6 72.♖b8+ ♔f7 73.♖h8 ♔g7 74.♖h1 ♔f7 75.♖h7+ ♔g8 76.♖e7 ♔f8 77.♖e6 ♖xe6 78.fxe6 ♔e7 79.♔f5 ♔e8 ½-½

So now we arrive at the fourth case: the transition to a pawn ending, which we have already seen in previous examples, because it is usually intermingled with the other three mechanisms.

Sandor Seres 2177
Jozsef Kis 2122
Hungary tt 2004 (5)



White to move

In this structure, as we have already seen in another example, White is unable to make a passed pawn on the f-file (which would be possible with pawns at h2 and g3, for example). So his only hope is the pawn ending, but this would not have worked if Black had been sufficiently vigilant.

45.♔d6

Usually, when the king appears on the sixth rank, it is essential for the defender to be attentive to the possible exchange of rooks and it is normally necessary to give check.

45...♖a1?

Black is not alert to the possible exchange of rooks, or perhaps he was simply relying on the check on a6 on the following move, which is sufficient in some positions, but not in this one.

It was already necessary to give the check with 45...♖a6+! and after any king move the danger of the exchange of rooks disappears, for example 46.♔e7 ♖a1 47.♖d8 ♖xa7+ 48.♖d7 ♖a6 and the rook ending is a draw.

46.♖c8!

The right square; probably Black was expecting 46.♖d8 or 46.♖e8.

If 46.♖d8 ♖a6+!= – here the intermediate check is correct, as well as necessary; likewise, 46.♖e8 ♖a6+!.

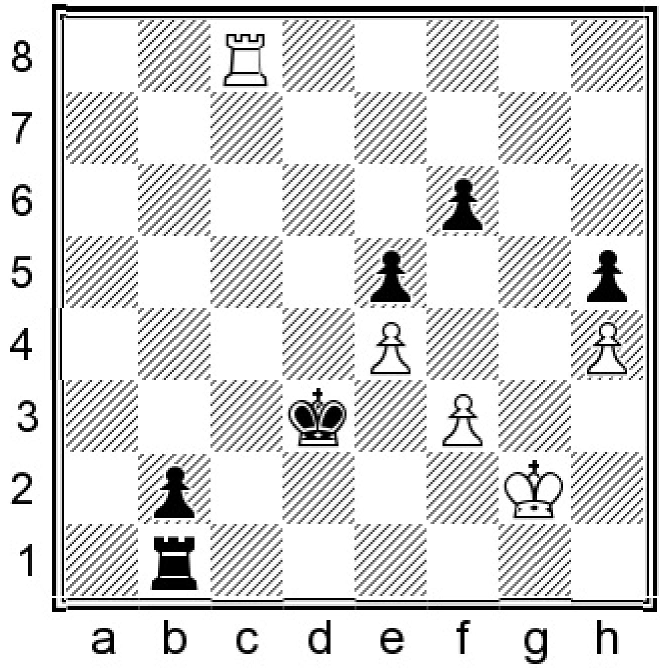
46...♖a6+ 47.♖c6! ♖a1

47...♖xa7 48.♖c7+ ♖xc7 49.♔xc7 and the pawn ending is won with natural moves, although in one variation only by a whisker: 49...♔f6 50.♔d6 g5 (50...♔f7 51.♔e5 ♔e7 52.f4 ♔f7 53.f5 and the h5-pawn falls) 51.hxg5+ (51.g3) 51...♔xg5 52.♔e5 ♔h4 (or 52...h4 53.f4+ ♔g4 54.f5 ♔g3 55.f6 ♔xg2 56.f7 h3 57.f8=♕ h2 and White wins, because his king can reach g3 in two moves) 53.f4+–.

48.♖c7+ ♔f6 49.♔c6 ♔f5 50.♔b7 ♖b1+ 51.♔c8 ♖a1 52.♔b8 ♔f4 53.a8=♕ 1-0

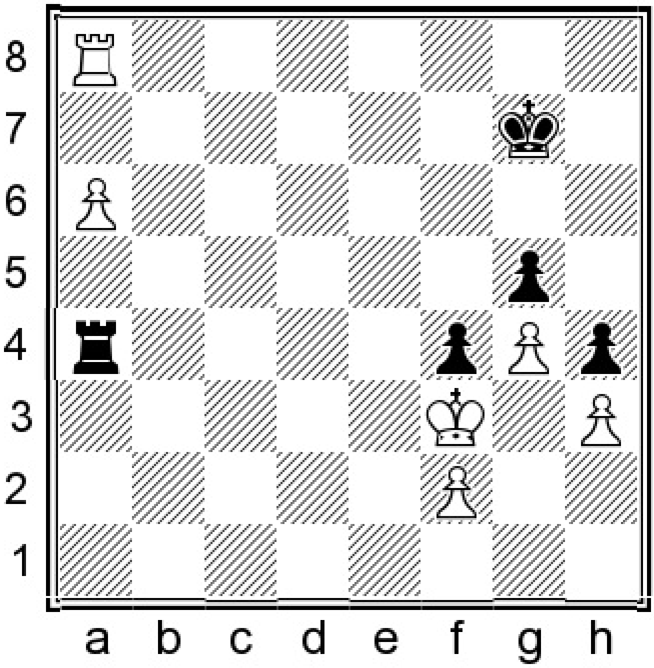
The transition to a pawn ending has greater chances of success if the pawn blocked on the seventh rank is not the rook's pawn.

Various games



This position was analysed in **Pattern 12**, but this is a good moment to review it.

Viswanathan Anand 2817
Avetik Grigoryan 2614

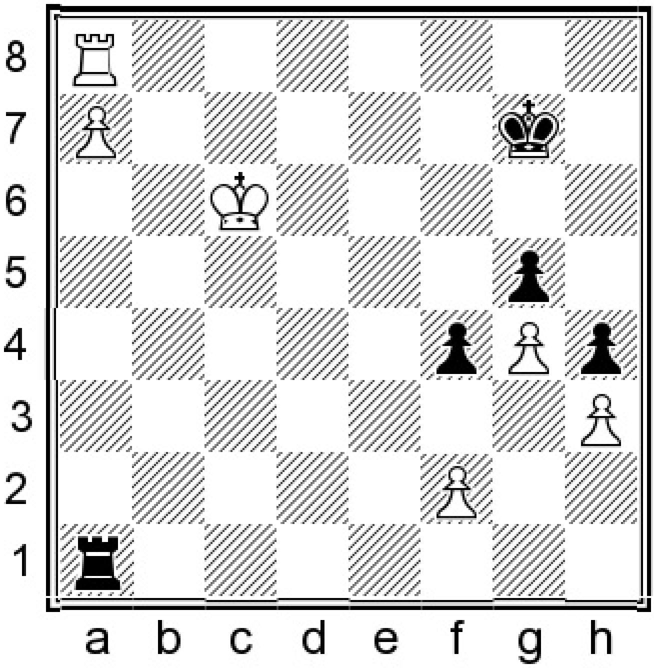


White to move

Should White advance the a-pawn to the seventh rank? Yes, he should, because one of the winning methods is available, i.e. the exchange of rooks to enter a winning pawn ending, which Black is unable to prevent:

55.a7! ♔h7 56.♔e2 ♔g7 57.♔d3 ♔h7 58.♔c3 ♔g7 59.♔b3 ♖a1 60.♔c4 ♖a5 61.♔b4 ♖a1 62.♔b5 ♖b1+ 63.♔c6 ♖a1

Black could have tried to displace the white king by interpolating a check with 63...♖c1+, so that the king does not have the b7-square available in response to a check on a6: 64.♔d6 ♖a1 (if Black gives another check, the offer to exchange will be on d7: 64...♖d1+ 65.♔e6 ♖a1 66.♖d8!) 65.♖c8! ♖a6+. This check is the resource that Black has gained by interpolating the check on c1, but now 66.♖c6 reaches the same winning pawn ending.



64.♔d6

As he will do later, here White could have already forced the transition to a winning pawn ending and he can do so by exchanging the rook either on d7 or c7: 64.♖d8! ♖xa7 (if 64...♖a6+, 65.♔b7 wins) 65.♖d7+ ♖xd7 66.♔xd7, as in the game; 64.♖c8 ♖xa7 65.♖c7+ ♖xc7+ 66.♔xc7 also wins.

64...♖a6+ 65.♔c7 ♖a2 66.♔b6 ♖b2+ 67.♔c6! ♖a2 68.♖d8!

Finally Anand decides to enter the pawn ending.

68...♖xa7 69.♖d7+ ♖xd7 70.♔xd7 ♔f7 71.♔d6 ♔f6 72.♔d5

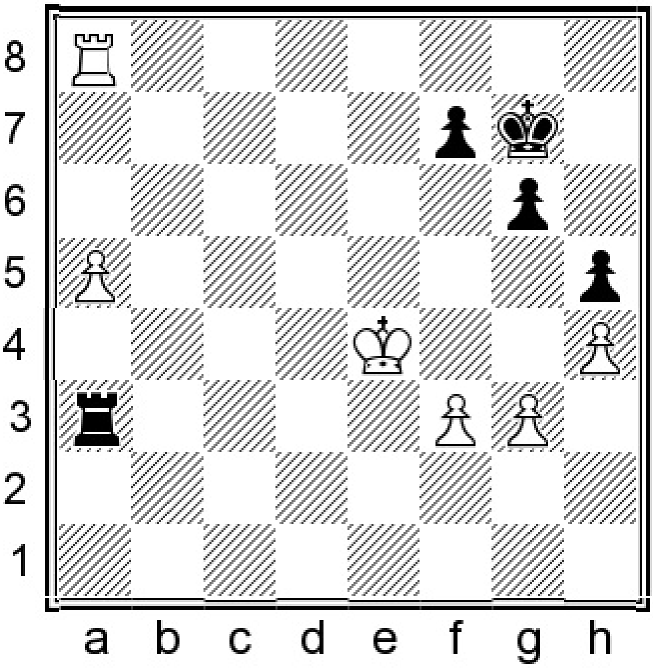
White even regains the opposition without needing to use his reserve tempo with f2-f3.

72.f3 also wins.

72...f3 73.♔d6 ♔f7

Black resigned.

Pattern 75 Rook in front of the passed pawn



This is a very important pattern, because it occurs with enormous frequency and it is almost impossible for the reader not to have encountered it several times in his own games. The main reason for this frequency is that, when the rook captures a pawn in front of its own pawn, it then needs three moves to manoeuvre to a position behind his pawn. Furthermore, as we saw in **Pattern 72** (Active rook vs passive rook), it has become common knowledge that it is preferable to give up the pawn and place the rook on an active square, rather than defend the pawn with a passive rook. It is also very common for the extra pawn to be the rook’s pawn on the queenside and for there to be several pawns each (often the same ones) on the kingside.

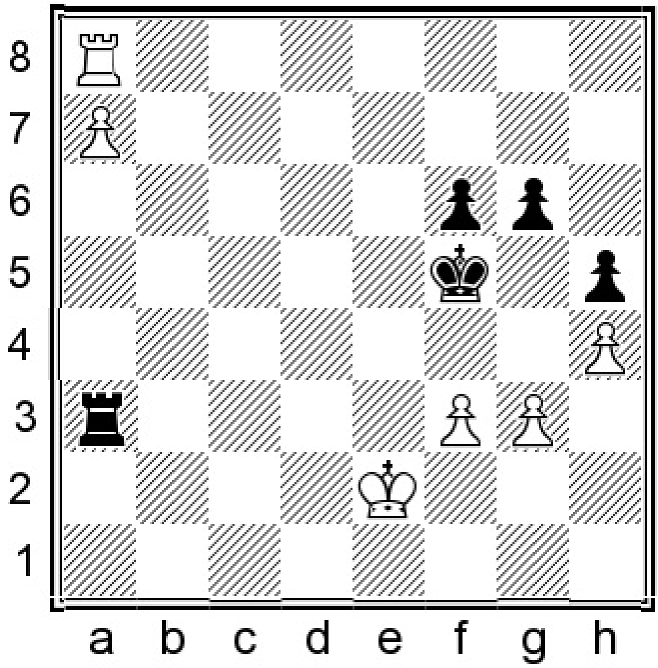
Traditionally, the position has been considered a draw and this theoretical evaluation remains valid. However, there are two circumstances which it is necessary to point out: the first is that the defence is not easy and in practice the defender often loses; the second is that the theoretical aspect of this ending has developed considerably in the last few years, thanks to the analysis engines, and many previous assumptions have been proved false. This fact is confirmation of how difficult it is to analyse the position perfectly and it suggests that possibly there will be some further discoveries in the years to come, although my sense is that we are very near to establishing a definitive diagnosis.

However, despite the great theoretical interest of these positions, in the next two patterns we shall not always analyse variations exhaustively. My intention in writing this book is to present the ideas that are useful in practice, and to do so in a clear way, with a minimum of examples and limiting the analysis to the most important variations, although in this section this is a challenge, and perhaps I have not succeeded.

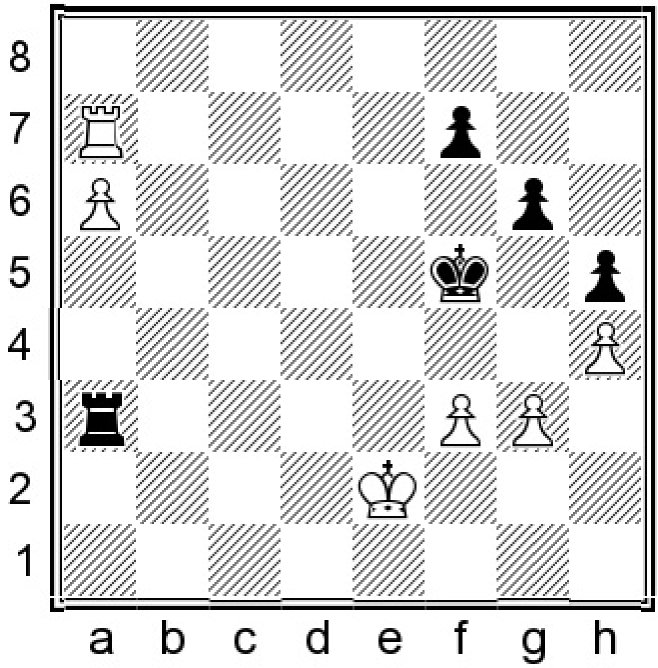
For the reader who wishes to delve further into the subject and find detailed analysis I can recommend the fifth edition of *Dvoretsky’s Endgame Manual*, in which all the theoretical knowledge to date has been collected.

Finally, I want to caution once again against the very widespread and lazy idea of treating these positions as drawn and not studying them properly, because then results will be bad.

Let us begin with three pairs of twin positions.



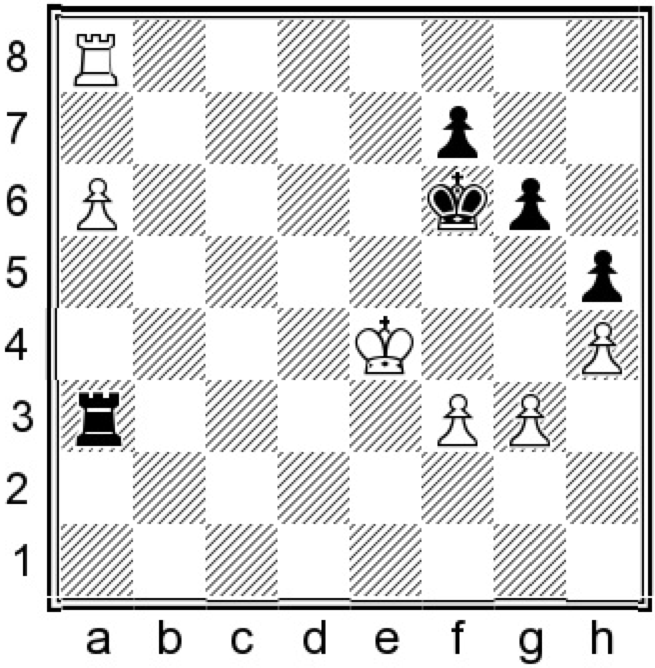
Position 1



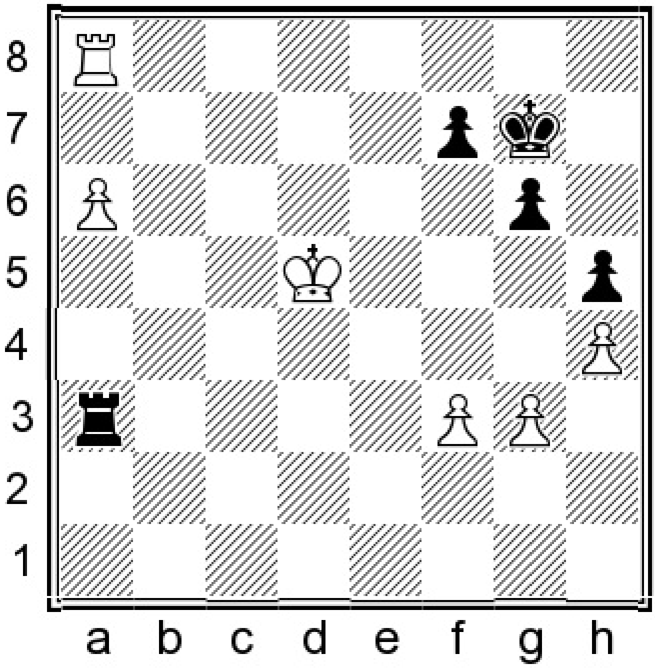
Position 2

The first position (with the pawn already on the seventh) could well belong to the previous pattern, but we present it here, because it usually arises from the positions of this section. With the pawn on f6 Black loses, because his king cannot retreat to the safe zone (g7/h7) and White wins with a long manoeuvre that includes bringing his king to h6.

The consequence is that in the second position Black should not play ...f7-f6 (1...f6) (which has been done in this position or similar ones innumerable times), because White then plays 2.♖a8, followed by 3.a7, and there is no time to prevent it. But Black can wait with ...♔f6 (or ...♔e5 or ...♔e6) and while he retains a line of retreat to g7 the advance of the white pawn to a7 is harmless.



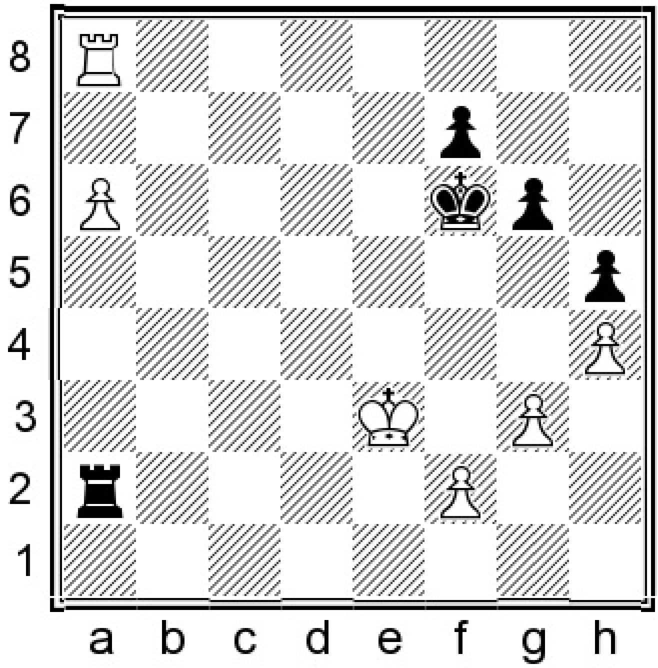
Position 3



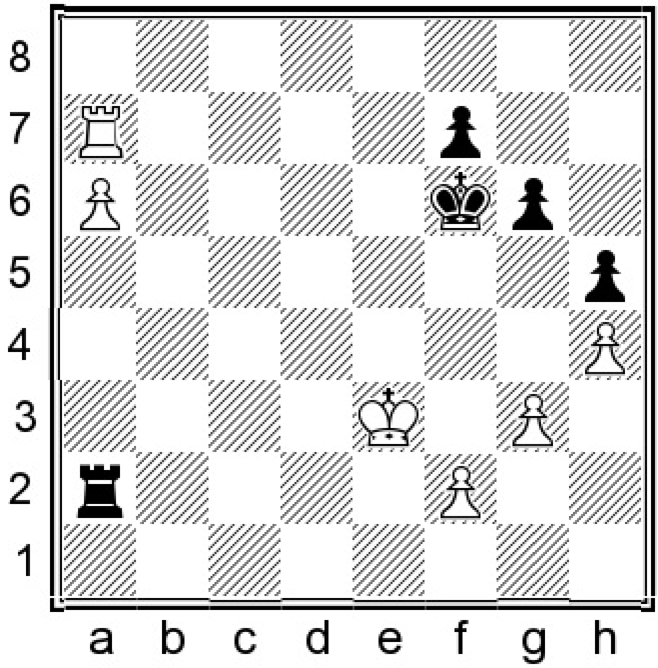
Position 4

In Position 3, White is prepared to play ♔d5 and bring his king to support the passed pawn, although this would not work if it is his move; but if the black king retreats, or the rook ceases to attack f3, then it works. Black has two adequate defensive plans: to wait with ...♔e6 or to break immediately with ...g6-g5, which is the one I recommend.

In Position 4, which results from playing 1...♔g7 in Position 3, White has already launched his king to support his pawn and he wins.



Position 5



Position 6

In Position 5, once again White could send his king to the queenside following a passive move by Black, or else he could prepare this with f2-f3. Black has at least two satisfactory plans:

A) Activate the king with 66...♔f5! to start counterplay by bringing his king to g4, for example 67.♔d4 (67.♖a7 ♔g4=) 67...♖xf2=, or

B) The immediate pawn break 66...g5!, which is my recommendation: 67.hxg5+ ♔xg5 68.a7 ♔f5=.

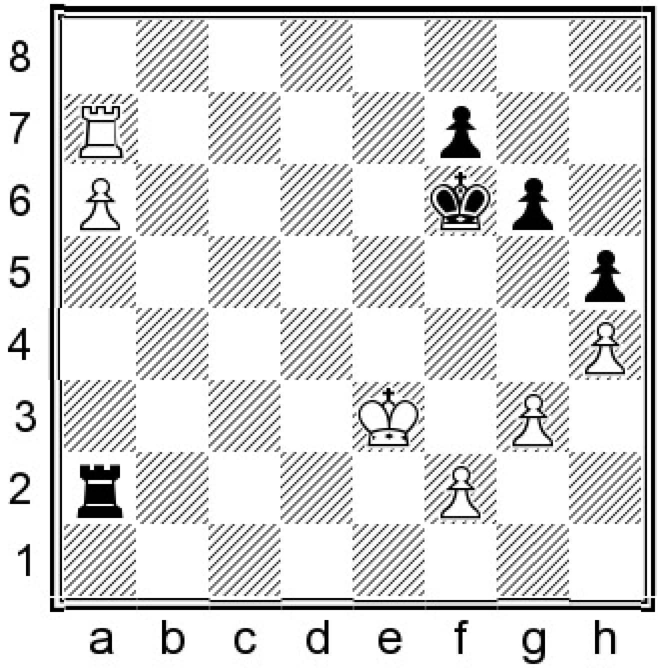
Finally, in the critical Position 6, which in my database appears thirteen times (not counting mirrored and reversed positions) and eighteen times counting the four mirrored and reversed positions, White has the usual plan (bringing the king to the queenside) and Black has once again only two satisfactory plans:

A) Again, my recommendation is the pawn break 66...g5! 67.hxg5+ ♔xg5 68.♖xf7 ♖xa6=;

B) 66...♖a4, hindering the advance of the white king, although after 67.♔d3 it is difficult to continue without ...g6-g5.

We are now going to see some games where these decisions were taken, or should have been taken.

Norbert Coenen 2418
Guido Kern 2334
Belgium tt 2001



Black to move

53...♔e6?

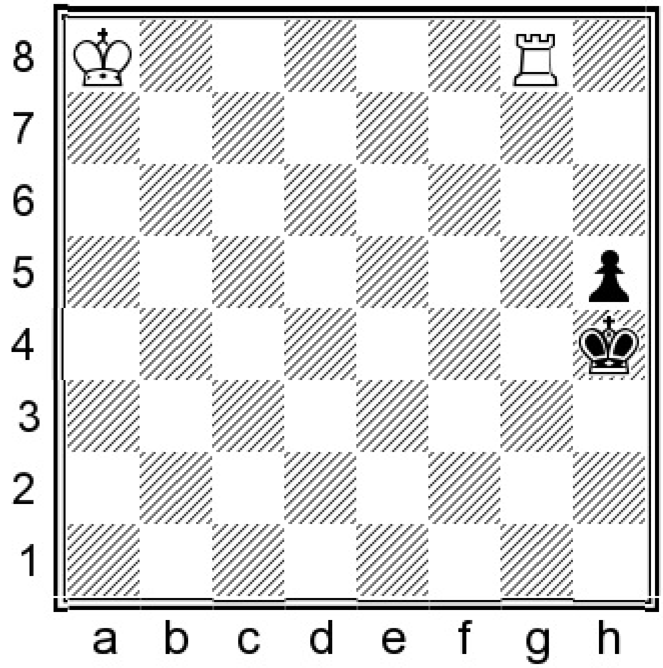
After this move, the white king rushes across to the queenside and Black loses. 53...g5!, as we have already indicated above, is the simplest, when a possible line would be 54.♔d4 ♔g6 55.♔c5 f6 56.♔b6 ♖b2+! 57.♔c6 ♖xf2 58.♖d7 ♖a2 59.a7 ♔f5, with sufficient counterplay to draw, although various other moves are also possible.

53...♔e6? 54.♔d4 ♖xf2 55.♖c7 ♖a2 56.a7 f6

56...♔f5 is the natural move, and the one that most tests White, but after 57.♔c4 ♔g4 58.♔b3! ♖a6 59.♖c4+ ♔xg3 60.♖a4 ♖xa7 61.♖xa7 ♔xh4 62.♔c3! (62.♖xf7? ♔g3=) the white king reaches the kingside and White wins: 62...♔g3 63.♔d2 h4 64.♔e2 h3 65.♔f1!+–.

57.♔c5 ♔f5 58.♔b5 ♖b2+ 59.♔c6 ♖a2 60.♔b7 ♖b2+ 61.♔c8 ♖a2 62.♔b8?

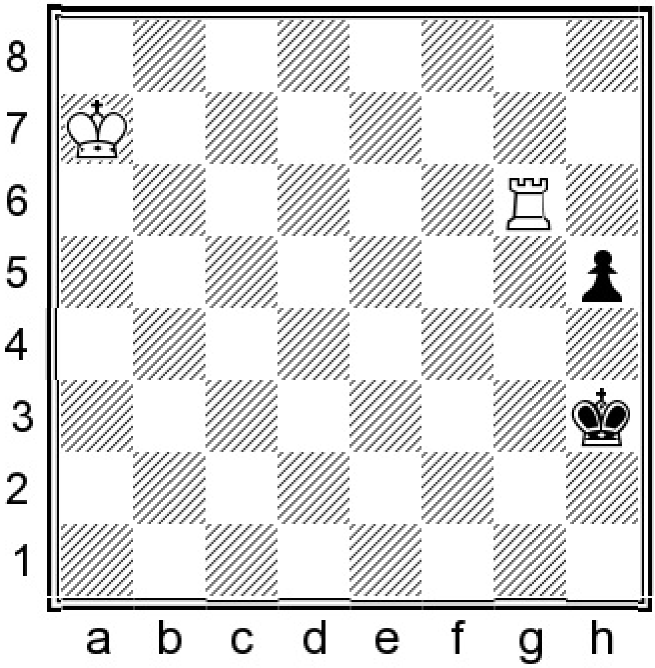
A logical mistake. Certainly it was not easy to discover that the winning move is 62.♖g7!, preventing 62...♔g4. Now in the variation 62...g5 63.♔b8 ♔g4 64.a8=♕ ♖xa8+ 65.♔xa8 ♔xg3 66.hxg5 fxg5 67.♖xg5+ ♔h4 68.♖g8...



analysis diagram

... White has one tempo more than in the game and his king arrives in time.

62...♔g4 63.♖c6 ♔xg3 64.♖xf6 ♔xh4 65.♖xg6 ♔h3! 66.♔b7 ♖xa7+ 67.♔xa7

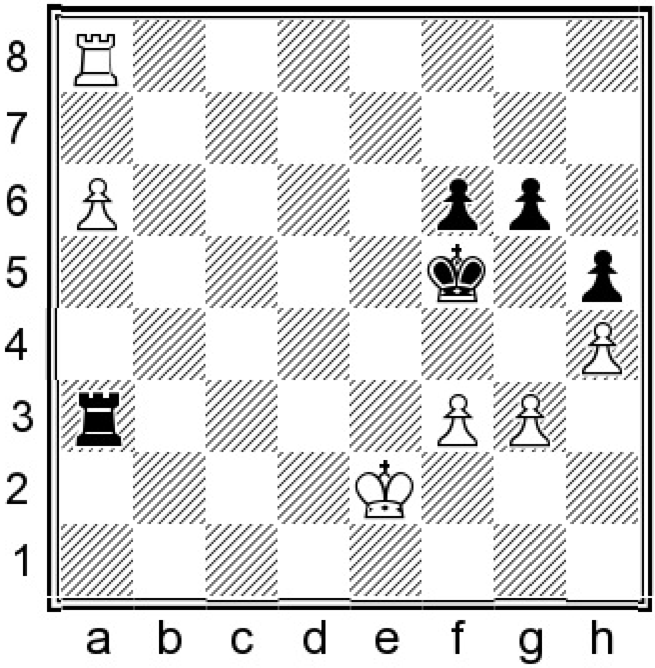


In this position, Black survives by one tempo:

67...h4 68.♔b6 ♔h2 69.♔c5 h3 70.♔d4 ♔h1 71.♔e3 h2 ½-½

Now we shall see the classic game with the mistaken advance of the pawn to f6, one of the few games in which the winning plan was applied in its entirety.

Wolfgang Unzicker
Erik Lundin
Amsterdam ol 1954 (3)



White to move

As we have already indicated, with the pawn already on f6, the advance of the a-pawn to the seventh rank wins:

49.a7! ♖a2+

The temptation to defend by means of the Vancura idea fails spectacularly here: 49...♖a1 50.♔d3 ♖d1+ 51.♔c4 ♖d7 52.♔c5 ♖e7 53.♔d6 ♖g7 54.♖c8! ♖xa7 55.♖c5#.

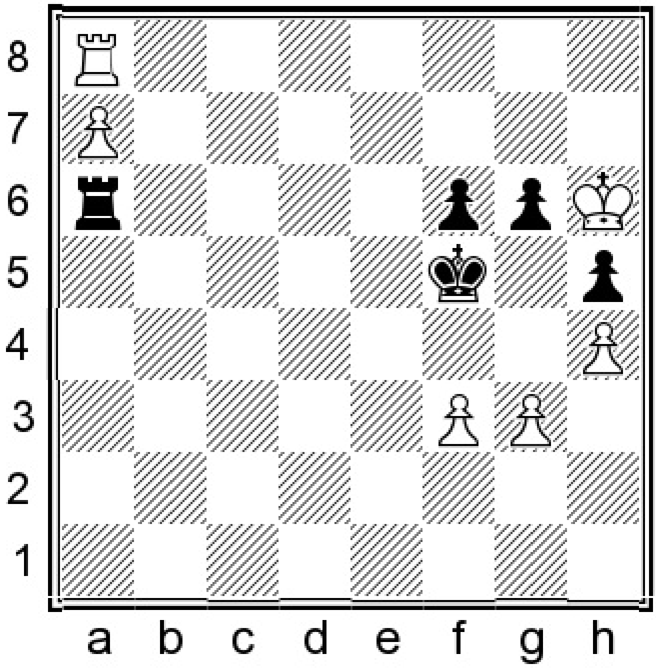
50.♔d3

Now White must execute a *great detour* manoeuvre to bring his king to h6, after which he can win with two different plans.

50...♖a1 51.♔d4 ♖a5 52.♔c4 ♖a3 53.♔c5 ♖a1 54.♔d6 ♖a3 55.♔e7 ♖a6 56.♔f7 ♖a3 57.♔g7 ♖a1 58.♔h6!

It is important to note that 58.g4+? was still premature: 58...hxg4 59.fxg4+ ♔xg4 60.♔xg6 (60.♔xf6 ♖a6+ 61.♔g7 ♔g3=) 60...f5 and the counterplay with the f-pawn saves the game: 61.h5 ♖a6+ 62.♔f7 ♔xh5 63.♖h8+ ♔g4 64.a8=♕ ♖xa8 65.♖xa8 f4 66.♔e6 f3=.

58...♖a6



Now we have reached the key position. White has two ways to win:

59.♖b8!

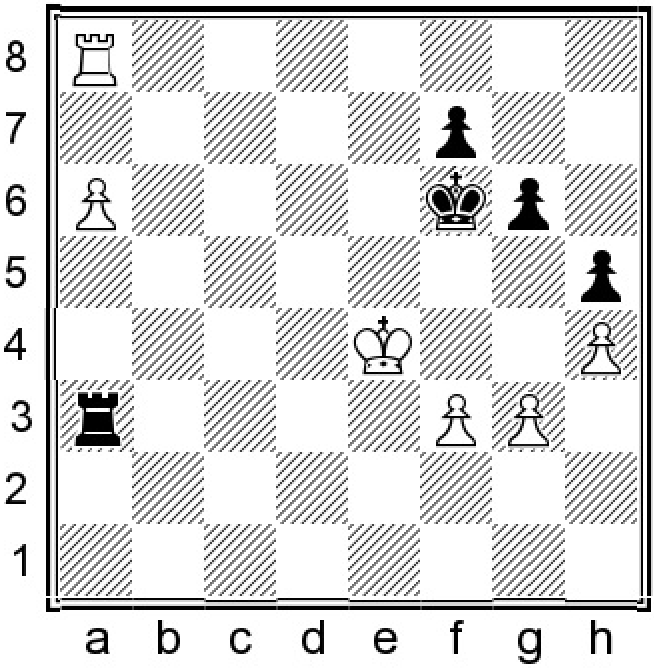
The move in the game is really the most comfortable but 59.g4+! also wins: 59...hxg4 60.fxg4+ ♔xg4 61.h5 gxh5 62.♖g8+ ♔f3 63.a8=♕+ ♖xa8 64.♖xa8 h4 65.♔h5 h3 66.♖a3+ ♔g2 67.♔h4! h2 68.♖a2+ ♔g1 69.♔g3+–.

59...♖xa7 60.♖b5+ ♔e6 61.♔xg6 ♖a8

61...♖a3 62.♖f5 and White wins two pawns.

62.♔xh5 ♖g8 63.g4 ♖h8+ 64.♔g6 1-0

Aryan Tari 2595
Espen Lie 2462
Stavanger 2017 (9)



Black to move

56...♔g7?

This passive move to hide the king only makes any sense when the a-pawn has advanced to the seventh.

56...g5? also loses here and it is interesting to compare the variation with the one in the previous game: 57.♔d5! (not 57.hxg5+? ♔xg5 58.♔d4 ♔f5! – to be able to capture on f3 – 59.♔c5 ♖xf3 60.♖b8 ♖a3=) 57...gxh4 58.gxh4 ♖xf3 59.♖b8 ♖a3 60.♖b6+ ♔f5 61.♔c6 ♔g4 62.♖b4+ ♔g3 63.♔b5!, followed by ♖a4, winning.

But 56...♔e6! draws with few problems, for example 57.♖a7 ♔f6 58.♔d5 ♖xf3 59.♖c7 ♖xg3 60.♔c6 g5=.

56...♔g7? 57.♔d5!

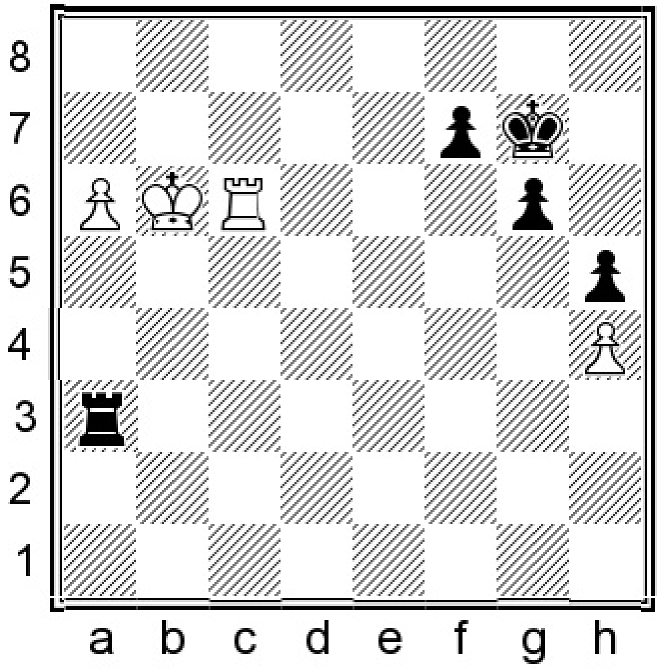
The king goes to the queenside. White’s plan is always the same; the problem is to calculate when it works and when not.

57...♖xf3 58.♖c8?

Where to move the rook is not always unimportant; in this case, from the c6-square it will obstruct its own king.

58.♖b8! was the winning move: 58...♖a3 59.♖b6 ♖xg3 60.♔c6 ♖a3 61.♔b7 g5!? (an interesting resource) 62.hxg5 h4 63.a7 h3 64.a8=♕ ♖xa8 65.♔xa8 h2 66.♖h6. Now we have transposed to two games and we shall follow one of these to the end: 66...f6 67.♖xh2 fxg5 68.♖f2! ♔g6 69.♔b7 ♔h5 70.♔c6 g4 71.♔d5 g3 72.♖f8 ♔g4 73.♔e4 g2 74.♖g8+ ♔h3 75.♔f3 1-0 Maletin-Ovod, St Petersburg 2010.

58...♖a3 59.♖c6 ♖xg3 60.♔c5 ♖a3 61.♔b6



61...g5!

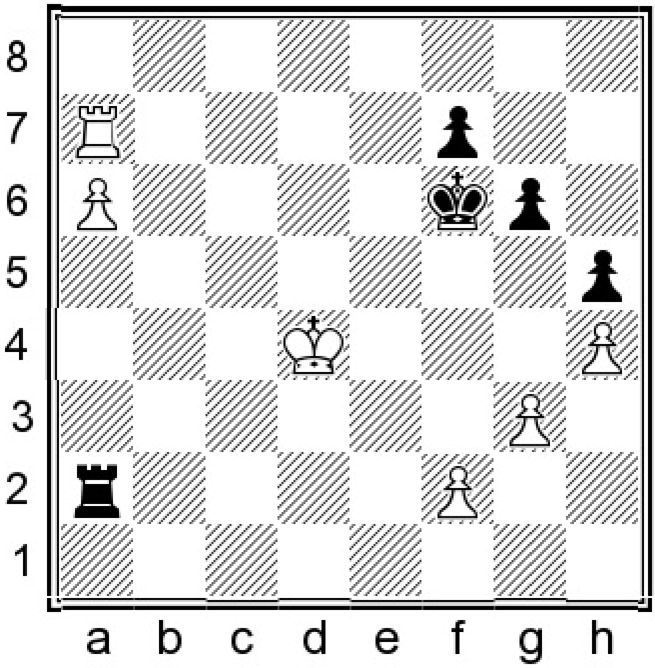
This is the only move. It works, thanks to the extra tempo in comparison with the previous variation.

62.hxg5 h4 63.a7 h3 64.♖h6 ♖b3+ 65.♔c7 ♖a3 66.♔b7 ♖b3+ 67.♔a6 ♖a3+ 68.♔b6 ♖b3+ 69.♔c7 ♖a3 70.♔b8 ♖b3+ 71.♔c7 ♖a3

Draw.

Finally, here is a high-level game, although played at a fast time control.

Alexander Grischuk 2711
Teimour Radjabov 2735
Odessa 2008 (4.4)



Black to move

The white king is on its way. Black must be very accurate now.

44...g5!

Even in a rapid game, Radjabov demonstrates his defensive mastery. Instead, after 44...♖xf2 45.♖c7! ♖a2 46.a7 ♔f5 47.♔c4! ♔g4 48.♔b3! ♖a6 49.♖c4+ ♔xg3 50.♖a4 ♖xa7 51.♖xa7 ♔xh4 52.♔c3 the white king arrives in time, as we have seen in the analysis of the game Coenen-Kern.

44...g5! 45.hxg5+

This move creates fewer problems than the advance of the king.

45...♔xg5 46.♔c4 ♖xf2 47.♖d7 ♖a2 48.a7 ♔g4 49.♔b3 ♖a6 50.♖d4+ ♔xg3 51.♖a4 ♖xa7 52.♖xa7 h4 53.♖xf7 h3 54.♔c3 h2 55.♖h7 ♔g2 56.♔d3 h1=♕ 57.♖xh1 ♔xh1

Draw.

Pattern 76 Rook in front of a knight's pawn

This theme is closely related to the previous one. The position with the knight's pawn also occurs very often and has some special characteristics, which justify studying it separately. The same cannot be said of the bishop's pawn, which is too close and allows the defender's king to attack it and draw easily.

Let us make a summary of the interesting practical differences of this new situation:

1) The defender's king is closer and can either approach the pawn to capture or exchange it or else hinder the entry of the stronger side's king;

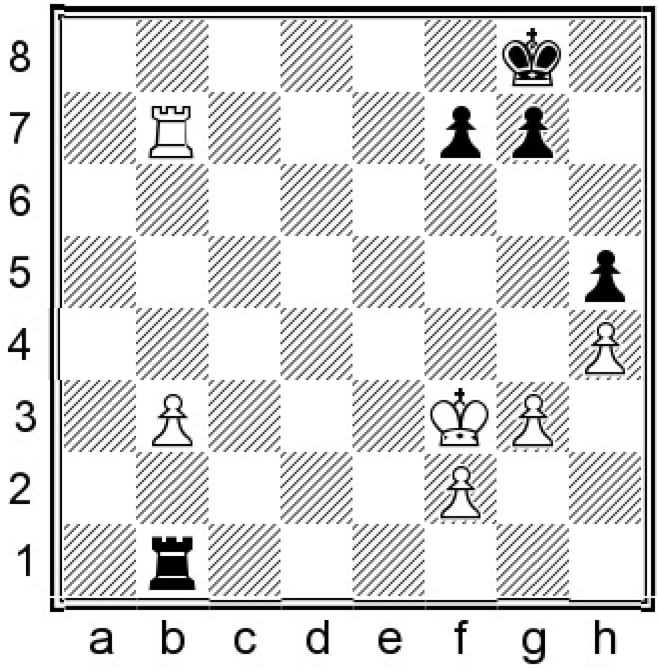
2) The stronger side's king is also closer and can arrive, win the rook, and return in fewer tempi, which makes its excursion to the queenside a more immediate and often more urgent plan;

3) The defender can create a barrier to prevent the entry of the stronger side's king, a plan that Dvoretsky attributes to Igor Kantorovich.

Before we begin, a few words about the theoretical aspect of the position: the new resources available to the defending king seem to indicate that the defending side has better prospects of success, as long as the king is activated in time; but otherwise the defender will lose more easily than against the rook's pawn. However, some of the variations are so intricate that it is almost impossible to present them in complete detail in a book that claims to be above all practical.

In the first example, we join the game a little before the critical moment.

Anthony Miles 2570
Gyula Sax 2585
Dubai ol 1986 (5)



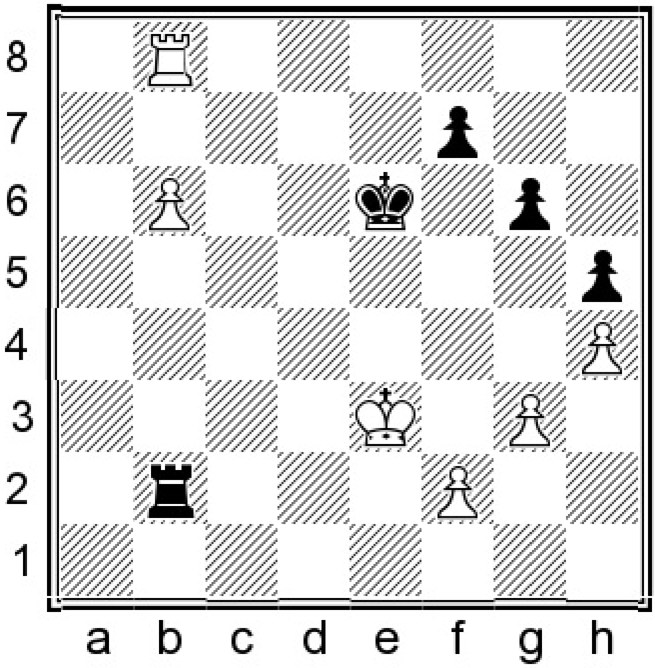
Black to move

It is easy to verify that the stronger side has no other plan than to advance his passed pawn to the sixth rank. Meanwhile, Black should construct his defensive position; his rook should attack the pawn at the base of White's kingside pawn structure, while his ideal kingside set-up is with pawns on f7, g6 and h5 and the king on e6.

45...♖b2

Black, with total logic, places his rook to threaten the pawn on f2, to hinder the mobility of the white king. For his part, White advances the pawn:

46.b4 g6 47.b5 ♔g7 48.b6 ♔f6! 49.♔e3 ♔e6 50.♖b8



50...♔f6?

Miles correctly evaluated this move as a mistake, and considered that Black could have drawn with two different plans: bringing the king across to capture the b-pawn, or seeking counterplay against the white pawns. He was quite right, although he left the variations incomplete:

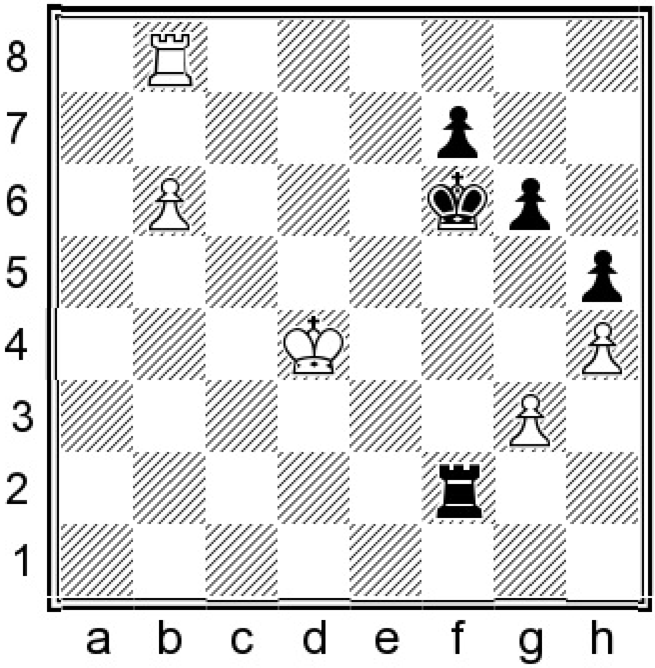
A) 50...♔f5! 51.♔d4 (51.f3 ♔e5 52.♔d3 ♔d5 53.♔c3 ♖b1=) 51...♔g4 52.♔c5 ♖xf2 53.♖a8 ♖c2+, with sufficient counterplay;

B) 50...♔d6! threatens 51...♔c6 and practically forces a repetition with 51.♖b7, because if 51.f3 then 51...♔c6 52.♖f8 ♖xb6 53.♖xf7 ♔d5=.

51.♔d4!

This is the big difference here in favour of the side with the extra pawn, in comparison with positions with the rook's pawn: here the white king is one move closer for defending the passed pawn and subsequently it will be able to head back more quickly. The majority of the games using this plan have been won.

51...♖xf2



52.♖a8!

The only square for the rook, which needs to help by creating bridges. 52.♖e8? ♖b2 53.♔c5 ♔f5! and the counterplay draws: 54.♔c6 ♖c2+ 55.♔d6 ♖b2 56.♔c7 ♖c2+ 57.♔b8 ♖b2 58.b7 ♔g4 59.♔c7 ♔xg3 60.b8=♕ ♖xb8 61.♖xb8 ♔xh4 62.♔d6 ♔g3 63.♔e5 h4=.

52...♖b2 53.♔c5 ♔e6

If 53...♔f5 54.♖a4!, threatening 55.♖b4, as well as preventing counterplay with 54...♔g4.

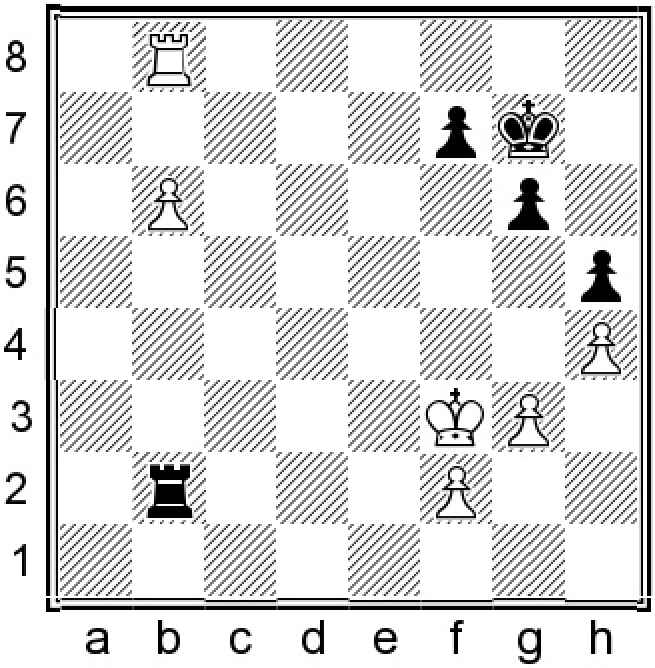
54.♔c6

It is appropriate to prevent 54...♔d7 by Black, although by now other moves also win.

54...♖c2+ 55.♔b7 ♖c3 56.♖a5! ♖xg3 57.♔a7 ♖b3 58.b7 f6 59.b8=♕ ♖xb8 60.♔xb8 1-0

In the next example, in which we have included several games which have either reached the diagram position or have transposed to one of the variations, we shall see examples of both good and bad defence.

Alexander Nosenko 2471
Alexandr Truskavetsky 2243
Alushta 2001 (1)



Black to move

This position is almost identical to the second diagram of the previous example and it has occurred in many other games. The kingside pawns are already on their ideal squares; likewise the rooks and the passed pawn.

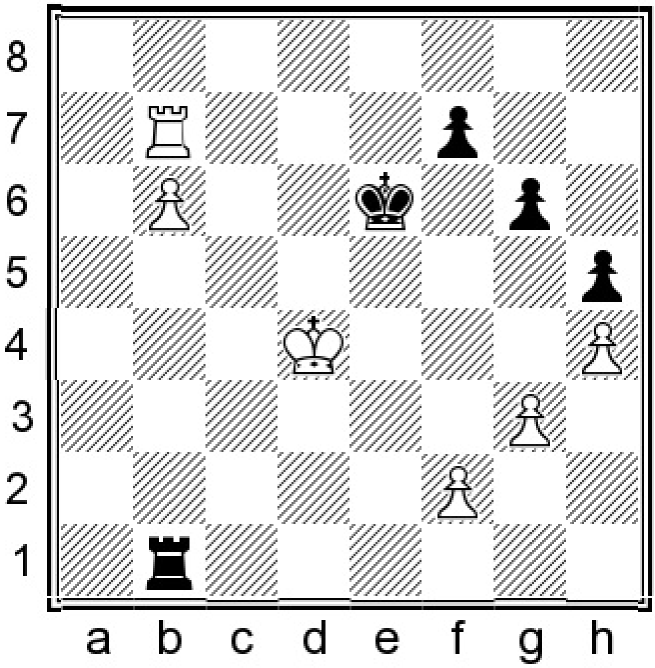
Now we are going to focus on the mechanism of defence, which depends on the position of the kings. If White can play ♔d4-♔c5 in time, he wins. Black must place his king on the e6-square if the white rook is on b7, and on d5 if the white rook is on b8 (although d6 can also be fine). In the first case Black creates an impassable barrier against the white king. In the second case Black threatens to draw by capturing the passed pawn, even if this involves losing the f7-pawn in return.

45...♖b4?!

A quite natural decision, trying to cut off the white king and to gain time for Black to construct the effective defensive system. However, it was better to do so immediately by bringing the king towards the centre with 45...♔f6! and now White can try to make progress with the rook either on b8 or b7. On b8 the rook allows the black king to approach, while on b7 the rook permits Kantorovich's defensive manoeuvre:

A) 46.♔e4 ♔e6! (the capture loses: 46...♖xf2? 47.♔d5 ♖b2 48.♔c6 ♔f5 49.♖a8! ♔g4 50.♖a5! ♖xb6+ 51.♔xb6 ♔xg3 and in this variation we can see the difference, compared to the position with the rook's pawn, i.e. the white king can get back more quickly: 52.♔c5 ♔xh4 53.♔d4 ♔g3 54.♔e3 f6 55.♖a6+–) 47.♔d4 ♔d6! (with the rook on b8, Kantorovich's barrier does not work, but instead the king can approach to capture the passed pawn) 48.♖f8 ♖xb6 49.♖xf7 ♔e6=;

B) 46.♖b7 ♔e6 47.♔e3 ♖b1 (47...♔e5 48.♔d3 ♔d5 49.♖xf7 ♖xb6 Condie-Motwani, Troon 1984, also leads to an easy draw) 48.♔d4

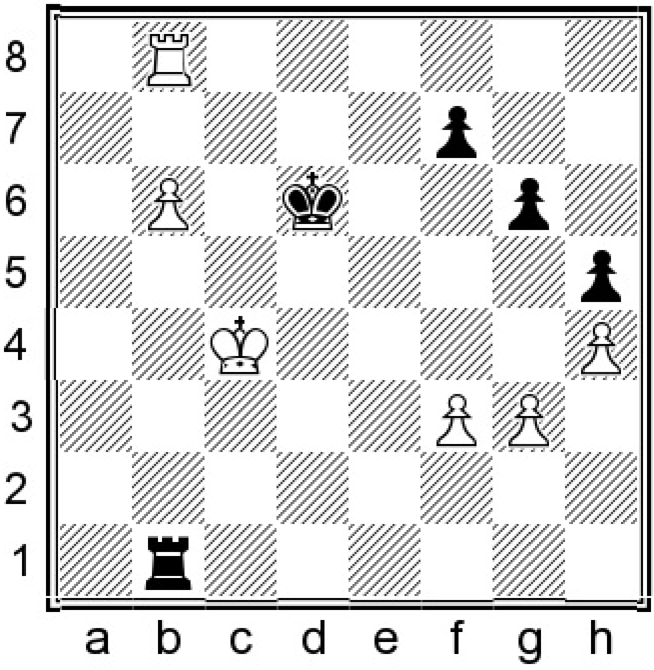


analysis diagram

and now Black has created an impassable barrier against the white king, which Dvoretsky calls Kantorovich’s barrier. Black simply gives check and the white king has no way to infiltrate: 48...♖d1+! 49.♔c5 ♖c1+ 50.♔b4 ♖b1+ 51.♔a5 ♖a1+ 52.♔b5 ♖b1+ and the king is unable get through.

45...♖b4?! 46.♔e3 ♖b1?

It is very difficult to avoid errors when one is unfamiliar with the plans, and in this position it is easy to err, even if the plans are known: 46...♔f6! 47.♔d3 ♔f5! (in the game Felix-Patiño, Baku 2016, the mistake was committed on the following move: 47...♖b2? 48.♔c3 ♖b1 49.♔d4 ♔f5 50.♔c5+– and 1-0 in 60 moves) 48.♔c3 ♖b1 49.f3 ♔e5 50.♔c4 ♔d6=



analysis diagram

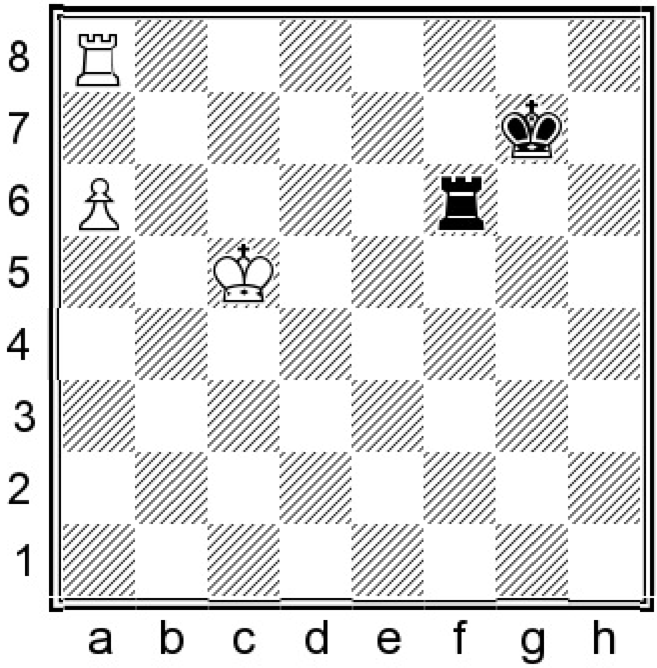
although this position seems to be a zugzwang and it would be lost for Black with the move.

47.♔d4 ♖b2 48.♔c3 ♖b1

48...♖xf2 49.b7 ♖f3+ 50.♔c4 ♖xg3?!. Trying to reach a fortress with rook against queen, but the rook is hanging after 51.♖g8+! and the promotion of the b-pawn with check.

49.♔c4 ♖c1+ 50.♔b5 ♖b1+ 51.♔c6 ♖c1+ 52.♔b7 1-0

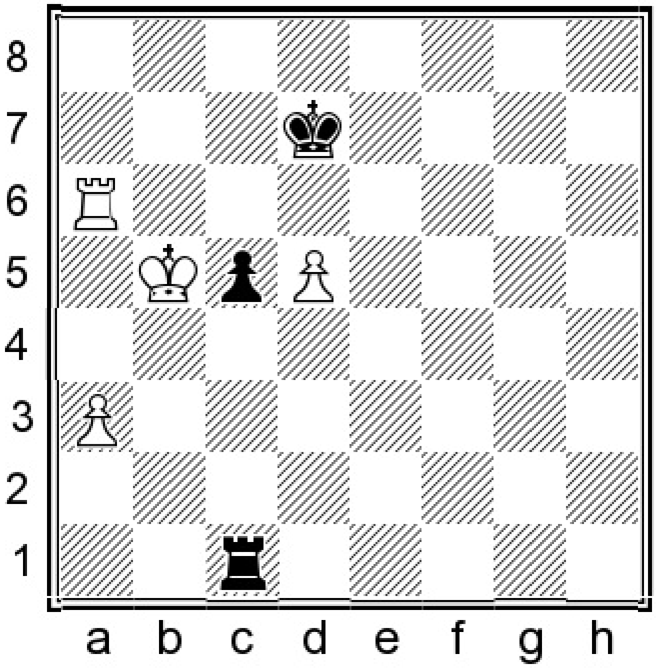
Pattern 77 Vancura



Vancura’s manoeuvre is one of the few that bears the name of a chess amateur and it is well known from the theoretical ending of rook + rook’s pawn vs rook (see *100 Endgames You Must Know*, **Ending 66**). The same idea is also applicable in the ending of rook + both rook’s pawns vs rook (**Ending 76**).

But in this section we are going to deal, not with theoretical positions, but with practical games, with more pawns, in which the Vancura manoeuvre is a useful resource. The moral is that you should keep this manoeuvre in mind, beyond the theoretical positions.

Michail Brodsky 2528
Dmitrij Jakovenko 2582
Russia tt 2004 (3)



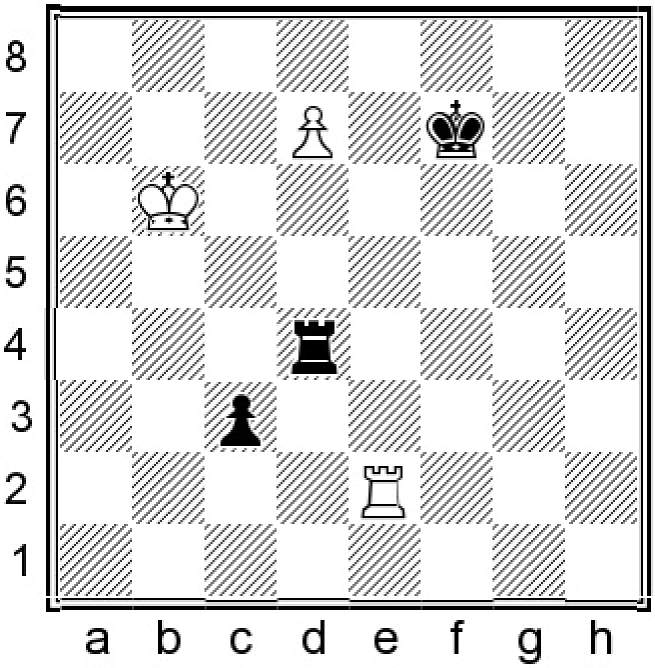
Black to move

White has an extra pawn and his king is more active. Black has to defend carefully.

51...♖b1+!

Although this is not the only move to draw, it is the easiest to understand and to calculate: Black gives up the pawn but gains open lines to check the white king, and when the king hides he applies the Vancura idea.

51...c4?! would have allowed the mechanism of the *umbrella*: 52.♔c5! c3 53.♖a7+ ♔e8 54.♔d6 ♖a1? (only this move seems to lose; 54...♖b1! – we can see that another defensive mechanism in basic endings, the Philidor position, can come to the rescue, and even force White to be careful: 55.♖e7+ ♔d8 56.♖h7 ♖b6+! 57.♔e5 c2 58.♖h8+ ♔d7 59.♖h7+) 55.♖e7+ ♔d8 56.♖h7 ♔e8 57.♖h2 ♔f7 (57...♖xa3 58.♔e6 ♖a6+ 59.d6 ♔f8 60.♖h8+ ♔g7 61.♖c8–+) 58.♖f2+ ♔e8 59.♔c7! ♖xa3 60.♖e2+ ♔f7 61.d6 ♖a7+ 62.♔b6 ♖a4 63.d7 ♖d4



analysis diagram

64.♔c6! (64.♔c7?! ♖c4+) 64...♔f6 65.♔c7! ♖c4+ 66.♔d8 c2 67.♔e8 c1=♕ 68.d8=♕++–.

51...♖b1+! 52.♔xc5 ♖c1+ 53.♔b6 ♖b1+ 54.♔a7

After 54.♔a5 ♖d1 Black captures the central pawn, with a draw.

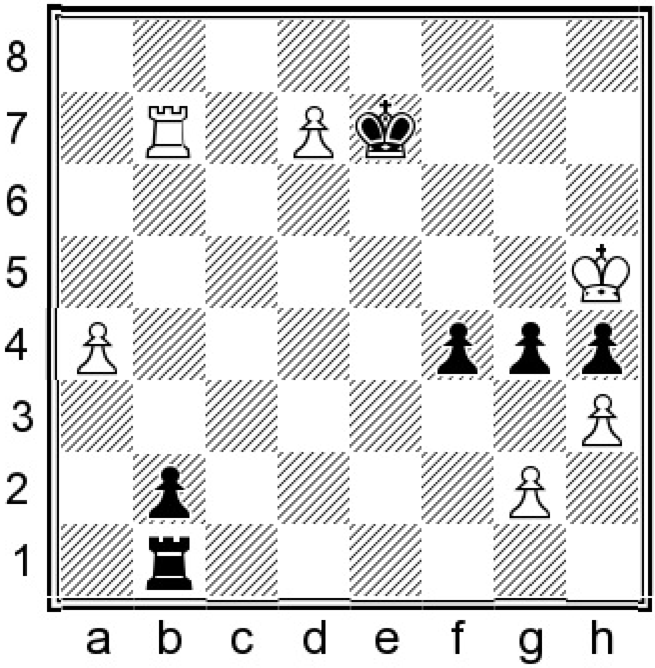
54...♖b5 55.d6 ♖b3!

A similar idea to the Vancura. This is not the only move to draw, but it is absolutely clear. The white rook is unable to move without losing the pawns and the king is trapped in the corner of the board.

56.a4 ♖b4 57.a5 ♖b5 ½-½

Now we shall see the same idea in a position with many pawns:

Roman Bordell
Jesus de la Villa
Sitges 1990



White to move

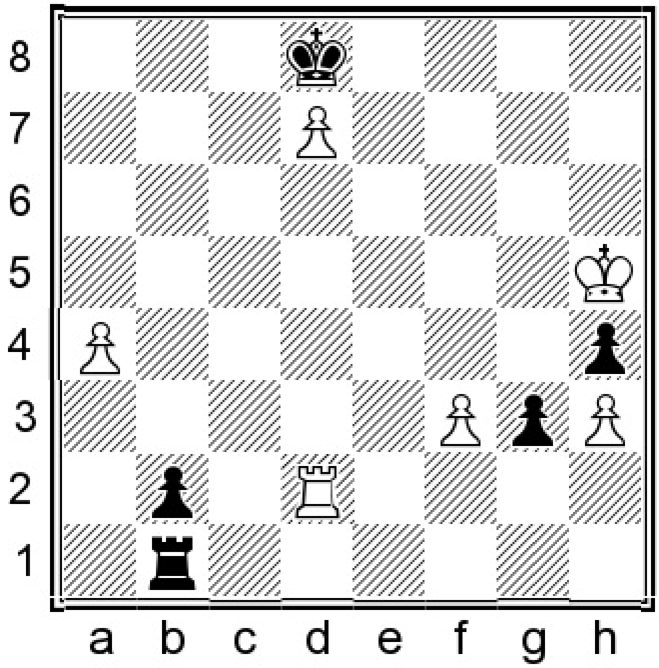
After a very long think, during which he verified that all the possible pawn captures would lead to the *violent escape* of the rook from b1 (analysed in **Pattern 74**: Rook trapped in front of the pawn on the seventh), the player with white decided to try the Vancura Defence:

55.♖b3!

55.d8=♕+!? was another way to try to apply the Vancura idea: 55...♔xd8 56.♖b3 gxh3 57.gxh3 f3 58.♖d3+ ♔c7!, but in this variation, the black king is able to support the b-pawn and Black wins (instead, 58...♔e7? would allow White to apply the idea with 59.♖d2!=) 59.♖d2 ♔b6 60.♔xh4 ♔a5 61.♔h5 ♔xa4–+.

55.♖b3! ♚d8!

This is the simplest solution, preventing the white rook from adopting the Vancura position. 55...f3? was one of the logical ways to go wrong here, which is very easy to do, if unfamiliar with the idea: 56.gxf3 g3 57.♖d3! ♔d8 58.♖d2!.



analysis diagram

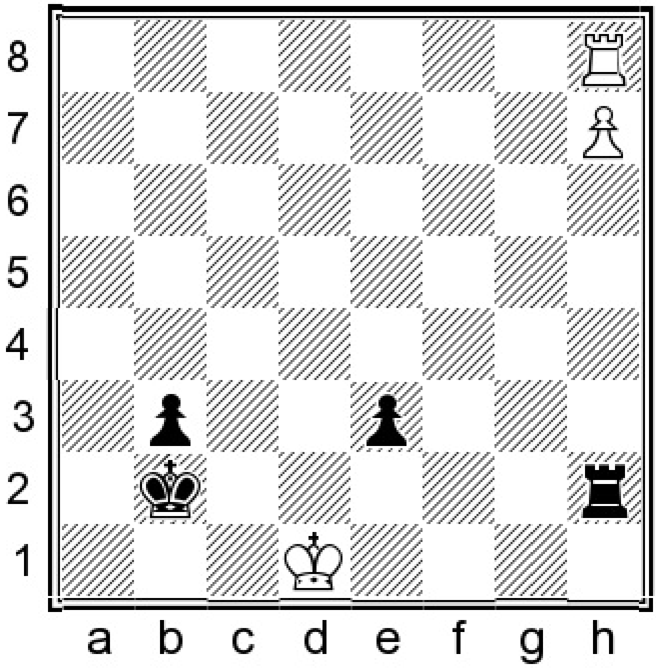
This is the perfect expression of the Vancura idea. The position is a draw: 58...♖h1 59.♖xb2 ♖xh3 60.a5 ♖h2 61.♖b8+ ♔xd7 62.a6=.

56.a5 f3

White has not managed to transfer the rook to the second rank with check and Black wins.

57.gxf3 gxh3 58.a6 h2 59.a7 ♖a1 60.♖xb2 h1=♕ 0-1

Viswanathan Anand 2786
Francisco Vallejo Pons 2686
Linares 2005 (12)



Black to move

In this type of position, with one pawn on the seventh with the rook in front and another with the king in front, regardless of whether it is two pawns against one, the transfer of Black's rook to his second rank is the winning manoeuvre, because the rook carries out a double function: attacking the opponent's pawn on its seventh rank and giving check to the enemy king from a distance. The manoeuvre is similar to the Vancura and therefore we are including it in this section.

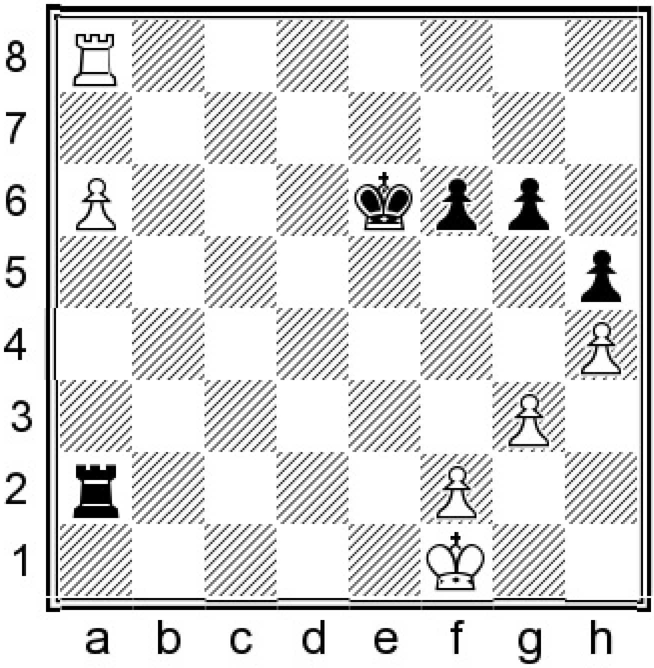
66...♔b1?

This allows an immediate draw. It can be considered a serious error, but I do not think it would be easy, with little time left, to discover the right idea, if one did not previously know it: 66...♖d2+! (transferring the rook to Black's second rank) 67.♔e1 ♖d7 68.♔e2 ♖e7! (68...♖c7 69.♔xe3 ♔c2 also wins easily) 69.♔d1 (69.♔e1 e2 zugzwang) 69...♖a7 70.♔e2 ♔a2–+, followed by 71...b2.

66...♔b1? 67.♖b8 ♖xh7 ½-½

Finally, an example which is of some theoretical interest regarding a position which we have already encountered in previous patterns.

Yaacov Zilberman 2473
Jura Bibik 2328
Pardubice 2007 (4)



Black to move

We join the game some moves earlier, which can give us a closer idea of the doubts that assail all types of players in these positions:

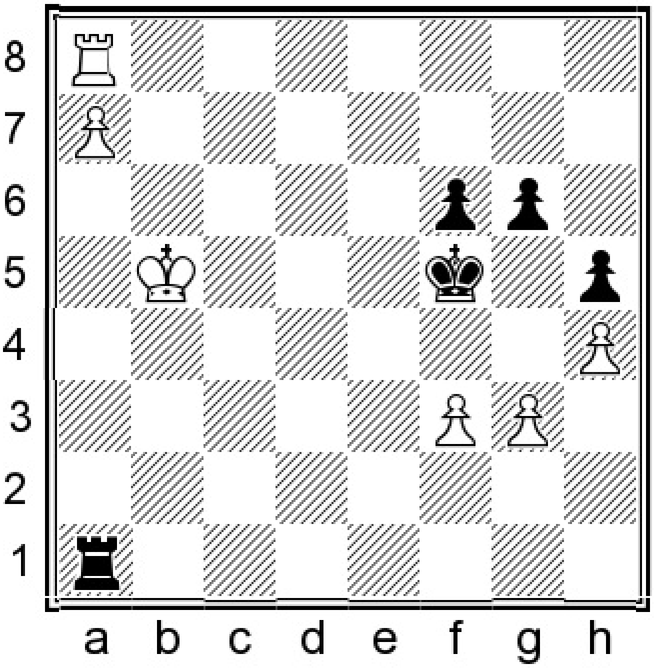
53...♔f5?

We already know that, with the pawn on f6, it is essential for Black to bring the king into the safe zone g7/h7 (see **Pattern 74**): 53...♔f7!.

53...♔f5? 54.a7! ♔g4 55.♔g2 ♔f5 56.♔h3 ♖a4 57.♔h2 ♖a2 58.♔g2 ♖a3

It was not possible to play 58...♔g4 59.♖f8! ♖xa7 60.♖xf6+–.

59.f3 ♖a2+ 60.♔f1 ♖a3 61.♔e2 ♖a2+ 62.♔d3 ♖a3+ 63.♔c4 ♖a4+ 64.♔b5 ♖a1



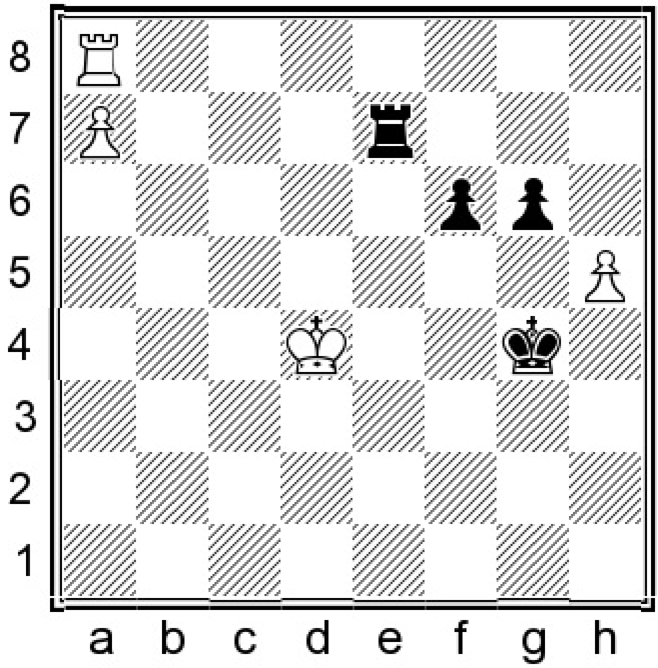
The new diagram is interesting. It seems that White now realises that there was no need to go so far with the king and that he just needed to play g3-g4 at the right moment. So he decides to return. In itself this is not such a strange idea; it perhaps seems stranger to have to go all the way to h6 in order to win.

65.♔c4 ♖c1+ 66.♔d4 ♖d1+ 67.♔e3 ♖a1

White decided to play 68.g4+ here. Considering only the result, this can hardly be criticised...

68.g4+? hxg4 69.fxg4+ ♔xg4 70.h5 ♖a3+?

Black goes wrong. There is nothing strange about this, if we take into account that only the Vancura Defence can solve this situation, and this is a resource which, even when you are aware of it, can easily be forgotten: 70...♖e1+! 71.♔d4 ♖e7.



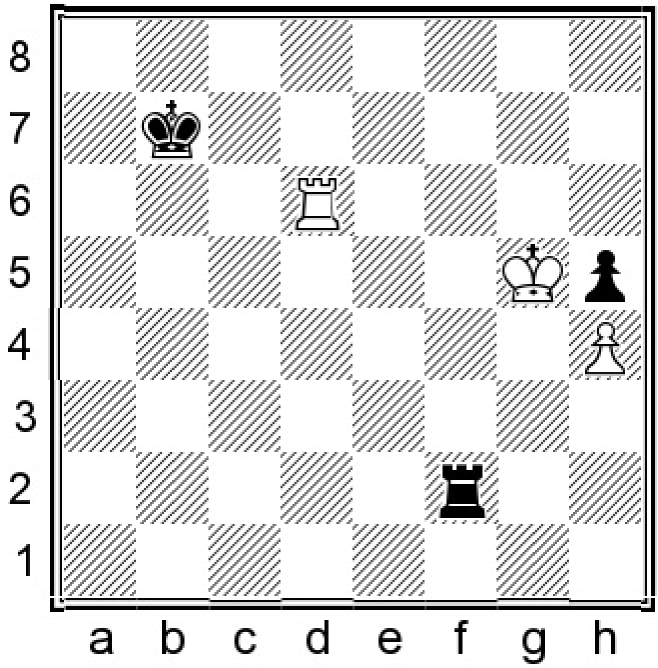
analysis diagram

And the black rook deals with both passed pawns, while the king supports the f-pawn: 72.hxg6 f5 73.♔c5 f4 74.♔b6 ♖e6+! (the Vancura mechanism, right to the very end) 75.♔b5 ♖e7.

70...♔f5 71.hxg6 ♖e1+ 72.♔d4 ♖e7 also draws, and also uses the Vancura idea, but it is less natural.

71.♔d4 ♖a4+ 72.♔c3 gxh5 73.♖g8+ ♔f3 74.a8=♕+ ♖xa8 75.♖xa8 h4 76.♖h8 1-0

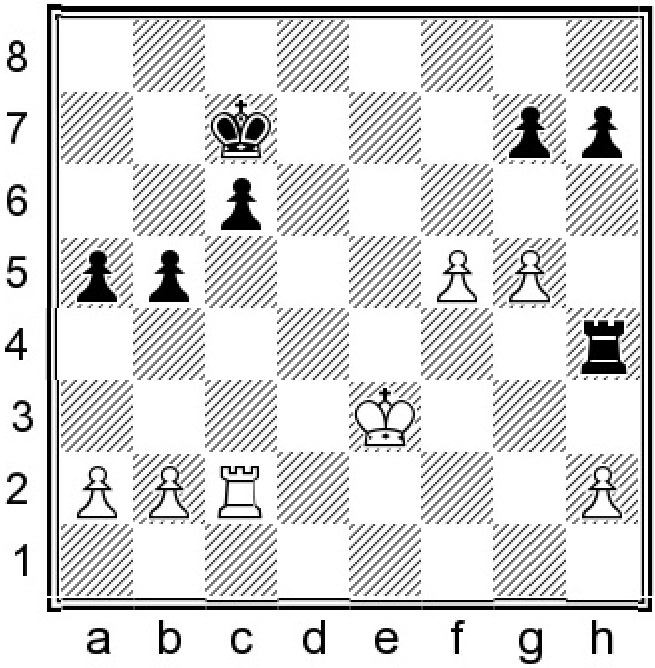
Pattern 78 King cut off from the passed pawn



When there is a passed pawn, or one is about to be created soon, there is a big difference between when the opposing king is able to block it and when it is too far away. A passed pawn blocked by the king loses all its value and can even be a weakness, whereas one that is not blocked by the king forces the opposing rook to take up a passive position or else give itself up for the pawn. So it can be important to plan for these circumstances in advance.

We join a game which has been a ‘dead drawn’ ending, but Black has just crossed the line that turns boldness into recklessness.

Christopher Ward
Matthew Sadler
Swansea ch-BCF 1995 (6)



White to move

However, only one move wins for White:

33.♖d2!

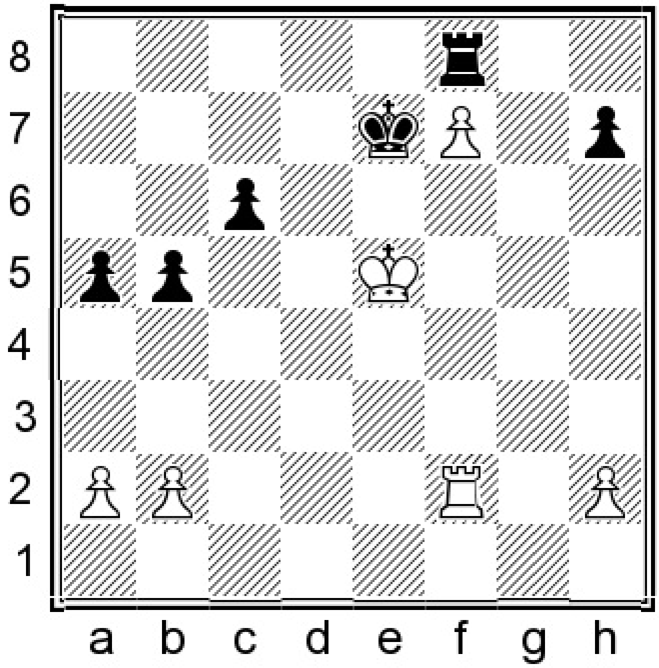
The black king is now cut off from White’s pawn majority, which threatens to advance, and there is no solution to the problem. The difference can be clearly seen in the variation 33.f6? gxf6 34.gxf6 ♔d7! and the black king easily copes with the problem of the passed pawn.

33.♖d2! ♖h3+

This makes things easier for White, but the alternative also loses:

33...♖g4 34.f6! gxf6 35.gxf6 ♖g6 36.♖f2! (not 36.f7? ♖e6+!) 36...♖g8 37.♔e4 ♔d7 and compared with the game position White does not have the tactical resource with ♖d2 and has to keep working:

38.f7 ♖f8 39.♔e5 ♔e7.



analysis diagram

The position has changed to the theme of **Pattern 73** – Rook pushing the passed pawn, and since the pawn ending is lost, Black's resistance is doomed to failure.

40.♖f6! ♔d7 (other moves allow the exchange of rooks, e.g. 40...♖xf7 41.♖xf7+ ♔xf7 42.♔d6+–, or 40...c5 41.♖e6+ ♔xf7 42.♖f6+ ♔e7 43.♖xf8 ♔xf8 44.♔d5 c4 45.♔c5 a4 46.a3+–) 41.a3 a4 (41...b4 42.axb4 axb4 43.♖f4 ♔e7 44.♖xb4) 42.h4 and Black runs out of tempo moves.

34.♔e4 ♖h4+ 35.♔e3 ♖h3+ 36.♔f4 ♖h4+ 37.♔g3

37.♔e5! also wins.

37...♖e4 38.f6 gxf6 39.gxf6 ♖e6

Or 39...♖e8 40.♔f4 ♖d8 41.♖xd8 ♔xd8 42.♔e5, reaching the same pawn ending as in the game.

40.♖f2 ♖e8 41.♔g4 ♔d7 42.♖d2+

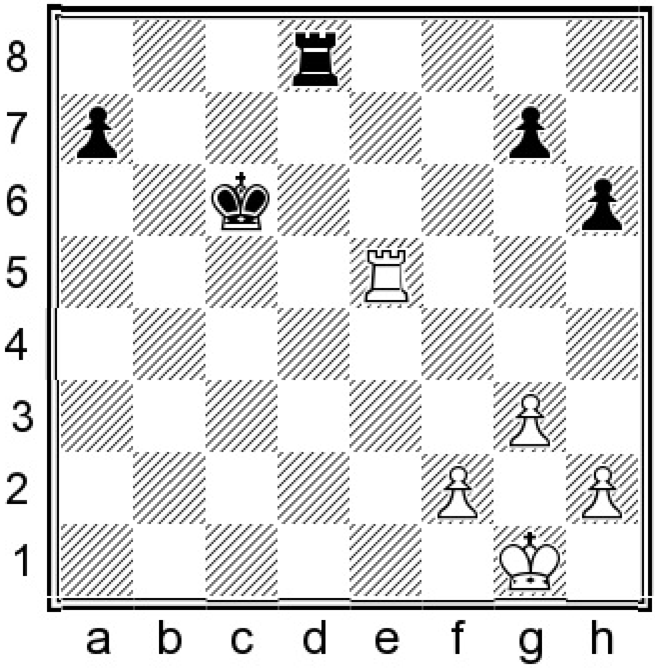
Taking advantage of the fact that the pawn ending is winning and making the task easier.

42...♔e6 43.♖e2+ ♔f7 44.♖xe8 ♔xe8 45.♔f5 a4 46.♔e6 c5 47.♔d5 c4 48.a3

Black resigned.

We return to the game Kasparov-Karpov, from **Pattern 73** – Rook pushing the passed pawn.

Garry Kasparov
Anatoly Karpov
Moscow WCh 1984 (m/6; variation)



Black to move

42...♖d5!

In the game, Black opted to place his rook behind the passed pawn with 42...♖a8 and ‘push’ it, which was studied in **Pattern 73**. Although this game represented a great and important victory for Karpov, analysis suggests that White could have held it.

42...♖d5!

In contrast, the text move allows the white rook to place itself behind the pawn, but it leaves the white king cut off and lets Black support his pawn with the king, which will receive the help of the rook at an appropriate moment. The analysis of the winning variations is simple but very instructive, above all due to the constant repetition of the same ideas.

43.♖e7!

The most logical move, attacking both pawns. The other two natural rook moves lead to very similar variations, where the king supports the advance of its passed pawn and the rook intervenes at key moments:

A) 43.♖e8 a5 44.♖a8 ♔b7 45.♖g8 ♖d7 46.♖e8 ♔b6 47.♖e6+ (47.♖a8 ♖a7 48.♖b8+ ♔c5 leads to a much more favourable version of the game, in which the white king fails to reach the queenside) 47...♔b5 48.♖e5+ ♔b4 49.♖e4+ ♔c3 50.♖e3+ ♔c4 51.♖e4+ ♖d4–+, followed by the advance of the pawn;

B) 43.♖e6+ ♔b5 44.♖e7 a5 45.♖xg7 a4 46.♖a7 ♔b4 47.♔g2 a3 48.f4 ♖a5 49.♖b7+ ♔a4! 50.♖b1 a2 51.♖a1 ♔b3 and the pawn immediately costs the rook.

43...♖d7!

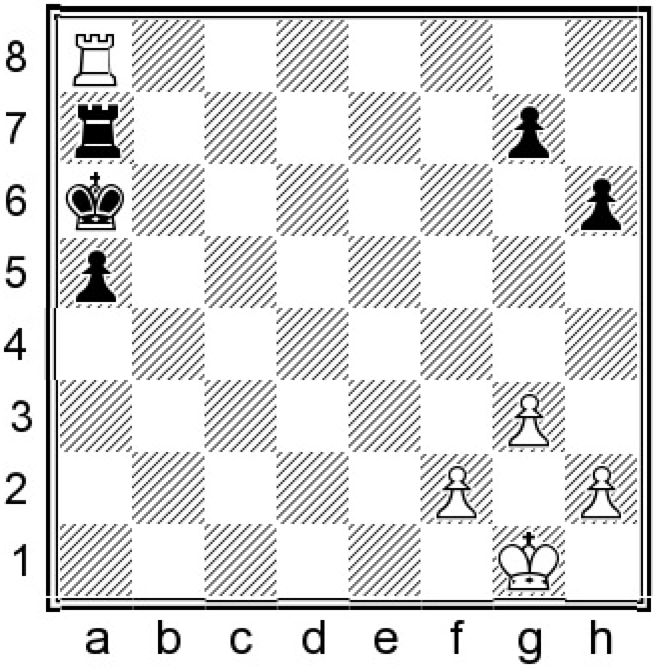
It is too soon to give up the pawn on g7.

44.♖e8

44.♖e5 ♔b6! (preparing ...a7-a5) 45.♖e6+ ♔c5 46.♖e5+ ♖d5 47.♖e7 a5! (now, with the king one rank further forward, the pawn can indeed be given up) 48.♖xg7 a4 49.♖a7 ♔b4 50.♖b7+ ♖b5, once again applying the bridge, when the white king is unable to intervene.

44...a5 45.♔f1

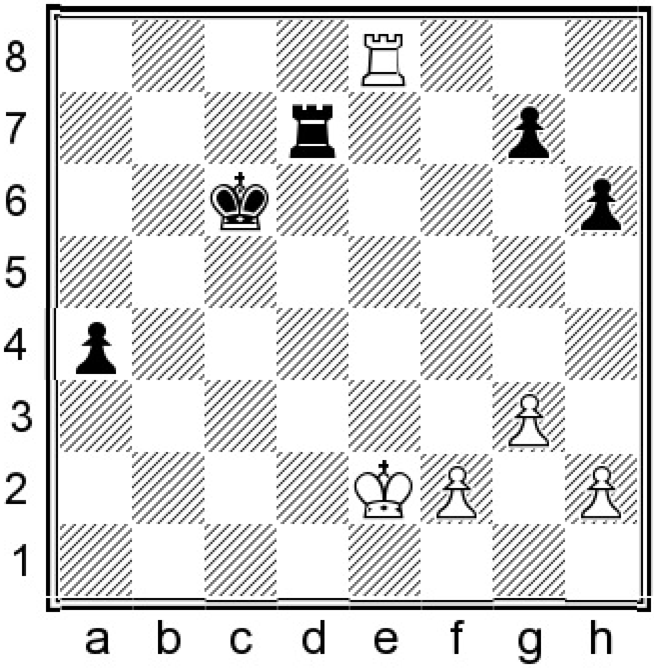
45.♖a8 ♔b5 46.♖b8+ ♔a6 47.♖a8+ ♖a7!–+.



analysis diagram

Again, occupying the position behind the pawn under much better conditions than in the game. We shall see this picture repeated many more times in this analysis.

45...a4 46.♔e2



46...♖d6!

46...♔b5? immediately is much more awkward: 47.♖b8+! ♔c4 48.♖c8+ ♔b3 49.♖b8+ ♔a2 50.f4 a3 51.f5, with more counterplay.

47.♖a8 ♔b5 48.f4

48.♖b8+ ♔a5 49.♖a8+ ♖a6! (once again this manoeuvre) 50.♖b8 a3 51.♖b1 a2 52.♖a1 ♔b4–+.

48...♔b4 49.♖b8+ ♔a5 50.♖b1

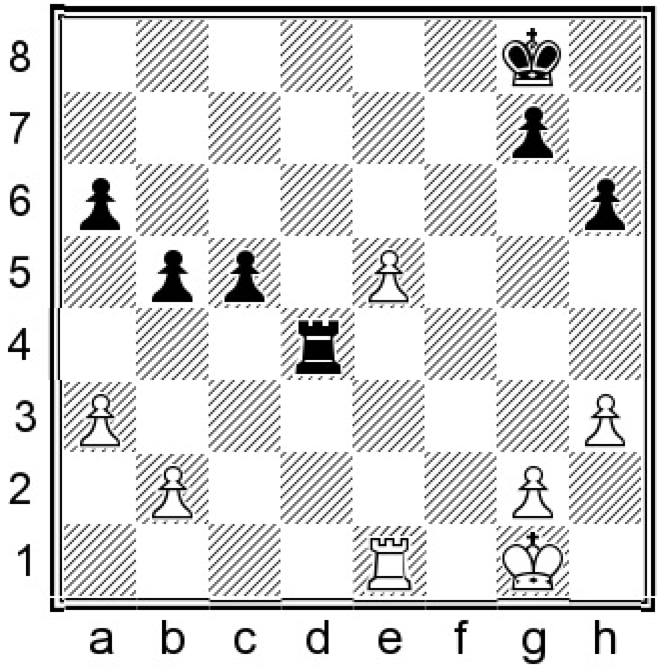
Or if 50.♖a8+ then again 50...♖a6 51.♖d8 a3–+.

50...a3 51.g4 ♔a4–+

Followed by 52...a2 and 53...♔b3.

As we shall see in the final example, cutting off the king can be done with defensive intentions.

Yehuda Gruenfeld 2455
Michael Stean
Skara Ech-tt 1980 (4)



White to move

33.e6?

The game move is losing. It was essential to prevent the black king from approaching the passed pawn: 33.♖f1! ♖d2 (33...♖e4 34.♖f5 ♖e2 35.♔f1 and the black rook has to keep watch on the pawn, because 35...♖xb2? allows 36.e6! and the pawn cannot be stopped) 34.e6 ♖e2 35.♖f5 c4 36.a4 bxa4 37.♖a5 (37.♖f4 ♖xb2 38.♖xc4 ♔f8 39.♖c6 a5 40.♖c5 a3 41.♖xa5 a2 42.♔h2 ♔e7 43.♖a6=) 37...♖xe6 38.♖xa4 ♖c6 39.♔f2, and with the black rook now so passive White should be able to draw without too many problems.

33.e6? ♔f8!

If the black king reaches e7, the e6-pawn loses almost all its value, so White now seizes the opportunity to exchange it.

34.♖f1+ ♔e7 35.♖f7+ ♔xe6 36.♖xg7 ♖d2!

But the result of the exchange is that the black king and rook are now much more active and can support the passed c-pawn, with which Black wins easily.

37.♖g6+ ♔d5 38.♖xh6 ♖xb2 39.♖h8 c4 40.♖c8 a5 41.h4 b4 42.axb4 axb4 43.h5 ♖a2 44.h6 ♖a7 45.g4 ♖b7 46.♖d8+ ♔e5 47.♖c8 ♔d4 48.♖d8+ ♔e4 49.♖c8 ♔d3 50.♖d8+ ♔c2 51.♖d4 c3 52.h7 ♖xh7 53.♖xb4 ♔d3 54.♖b8 ♖d7 55.♔f2 c2 56.♖c8 ♖d4

And White resigned.

Chapter 11
Rook vs minor piece

In the endgame, the advantage of the exchange is very great, and in most cases it can be exploited without the need for finesses. So we shall only be dealing with those positions in which the struggle is of interest.

For the side with the rook, before reaching this type of ending, exchanging the last major piece is better than winning a pawn.

Unless the side with the minor piece has an extra pawn or a dangerous passed pawn, the only option is to create a fortress, and this is only possible with all the pawns on one wing. It may come as a surprise that the bishop is more successful than the knight in this task, but this is because the way to breach a fortress usually involves the entry of the king, and a bishop which is well coordinated with its pawns can defend the neighbouring squares more successfully.

The bishop’s problems are aggravated when the pawns do not help to defend the squares of the opposite colour, and this is the cause of one of the most obvious patterns.

Situations with passed pawns are somewhat chaotic in both cases, although perhaps a little more so in the case of the knight. In any case, they require the analysis of many examples to understand them fully.

Finally, positions with pawns on both wings, without any passed pawns, are very difficult to hold for either minor piece and the winning strategy for the side with the rook is similar in both cases.

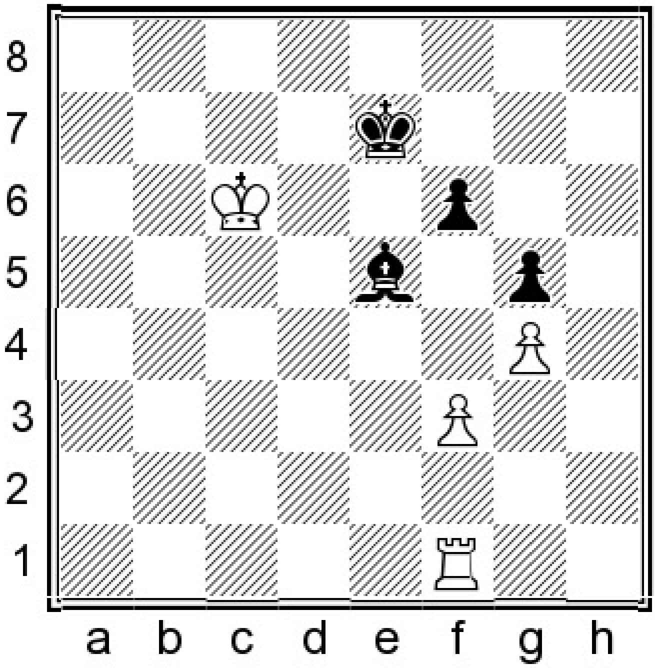
Pattern 79 Making progress on one colour

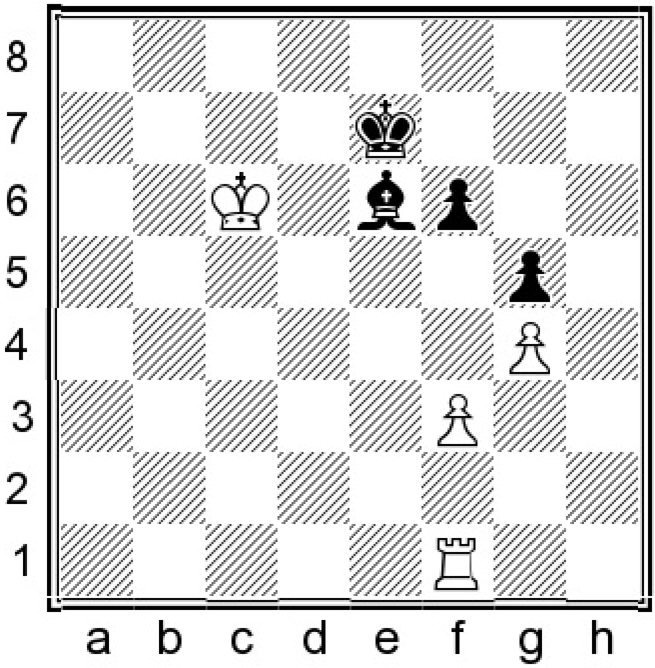
We are going to begin with the struggle of rook vs bishop, where themes based on colour are very important. The first situation that we shall study in the struggle of rook vs bishop are positions in which there are some blocked pawns and in some cases the bishop has an extra pawn.

In these positions, the main factor is the colour of the squares on which the pawns of the side with the bishop are blocked. If the pawns are fixed on the same colour as the bishop, then defeat is almost certain. The strategy for the side with the rook is to slowly but surely make progress with his king, via the squares of opposite colour.

If there is a pawn blocked on the opposite colour to the bishop, that side acquires two advantages at once: the bishop and the pawns work together to defend the squares of both colours and one of the two enemy pieces (rook or king) has to defend their own pawn and that limits their mobility.

Series: Rook vs bishop





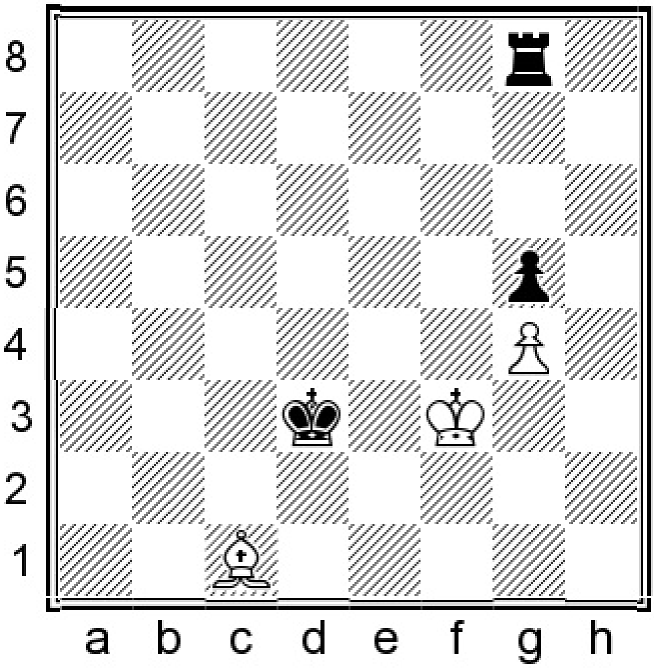
The two positions above are almost identical, but the only difference between them leads to different results. In the first diagram the white king can travel easily via the light squares, more or less like this:

54.♔d5 ♔f7 55.♖b1 ♗c3 56.♖b7+ ♔f8 57.♔e6! ♔g8 58.♖f7 ♗d4 59.♖xf6 1-0

In the second diagram, Black has to take care, but without any serious errors he cannot lose, for example: **1.♖e1 ♔f7** This is the only move. **2.♔d6 ♗c4 3.♖e7+ ♔f8!** As is this one; 3...♔g6? loses to 4.♖e4 ♗b3 5.♔e7. **4.♖c7** From now we join the game Landa-Harikrishna, Germany Bundesliga 2017/18: **4...♗b3 5.♖b7 ♗c4 6.♖b4 ♗a2 7.♖b8+ ♔f7 8.♖b7+ ♔f8 9.♖b4 ♔f7 10.♖b8 ♗c4 11.♖b7+ ♔f8 12.♖b4 ♗a2 13.f4 gxf4 14.♖xf4 ♔g7 15.♔e7 ♔g6 16.♖xf6+ ♔g5 17.♖f2 ♗b3 18.♖g2 ♗d1**

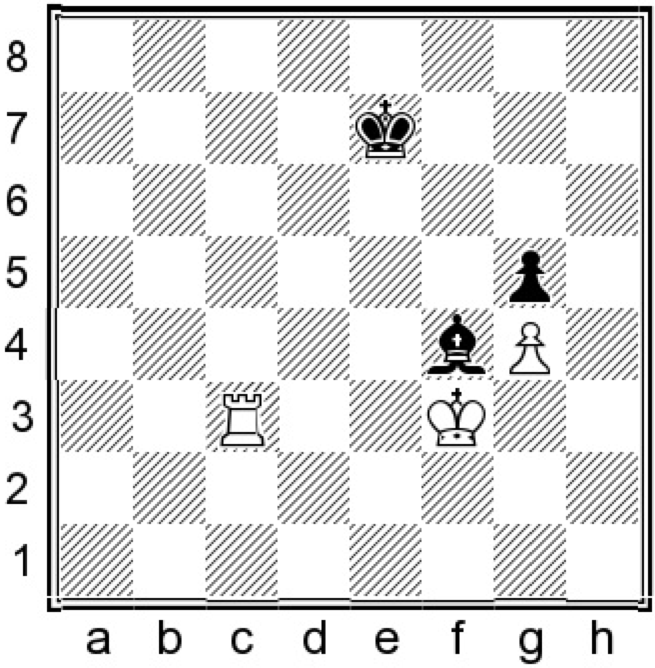
19.♔e6 ♗xg4+ 20.♔e5 ♔h5 21.♖xg4 ½-½

Akiba Rubinstein
Savielly Tartakower
Vienna 1922



Black to move

Igor Khenkin
Christian Braun
Bad Wiessee 2002 (6)



Black to move

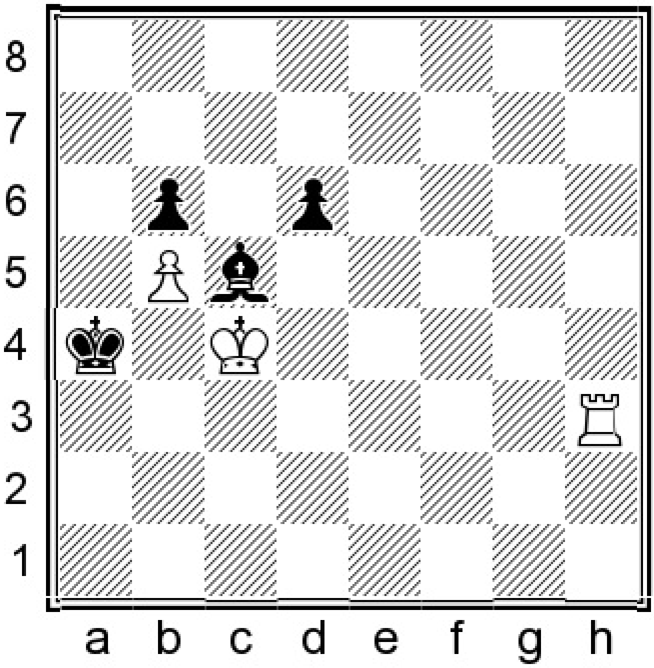
Now we have a second series with a single pawn each. I have no doubt that the reader already knows which position is a draw and which one loses, despite the fact that in the first diagram the black king is very active.

With blocked pawns, it is useful but not essential for the bishop to attack the enemy pawn. The first position is a draw: **1...♔d4 2.♗d2 ♔e5 3.♗e3 ♔f6 4.♗d4+ ♔g6 5.♗e3** White keeps targetting the pawn (pawns in the crosshairs). **5...♖b8 6.♗d2 ♖b5 7.♔e4** White can wait. No matter where the black king goes, Black cannot win: **7...♔f6 8.♗c3+ ♔e6 9.♗d2 ♔d6** 9...♖e5+ 10.♔f3 ♔d5 11.♗c3 ♖e6 12.♗d2=. **10.♗e3 ♔c6 11.♗d2 ♔b6 12.♗e3+ ♔a5 13.♗d2+ ♔a4 14.♗e3 ♔b3 15.♗c1 ♔c2 16.♗xg5!** This is the simplest, but maintaining the attack on the pawn also draws. **16...♖xg5 17.♔f4= ♖g8 18.g5 ♔d3 19.♔f5 ♔d4 20.g6 ♔d5 21.♔f6 ½-½**

In contrast, in the second position White won quickly, as usual by advancing his king via the light squares: **61...♔e6 62.♔e4 ♔f6 63.♖c6 ♔f7 64.♔f5 ♔g7 65.♖g6 ♔f7 66.♖b6 ♔g7 67.♖b7 ♔f8 68.♔f6 ♔g8 69.♖g7+ ♔f8 70.♖f7 ♔g8 71.♔g6 1-0**

Now we are going to analyse a position in which the side with the bishop has an extra pawn and seems very solid. White has to work harder, but the analysis of a single position should be enough to understand the mechanism and to sense which positions are winning and which are not.

Michael Rahal
Marcelo Ubach
Badalona 1989 (analysis)



White to move

The first task is to drive the black king to the bottom edge of the board, by means of zugzwang and direct threats.

1.♖d3!

With 1.♖b3? d5+ 2.♔c3 ♗d4+ 3.♔c2 ♗c5 White would not win, because the rook would be tied to the defence of the pawn.

1.♖d3! ♗b4 2.♖d1 ♔a3

Now the king has to move away from the white pawn, because if 2...♗c5 then 3.♖a1+ ♗a3 4.♖a2! and White wins.

3.♖a1+ ♔b2 4.♖g1

It is essential to keep working. If 4.♖a7 ♗c5 5.♔d5? the penetration turns out to be premature after 5...♔b3!. Now there is no way back and a draw is inevitable, e.g. 6.♔c6 ♔b4 7.♖d7 ♔c4 8.♖d8 ♔b4 9.♖b8 ♔c4=.

4...♗c5 5.♖g3 ♔a2

5...♗a3 6.♖g2+!.

6.♖b3!

White is trying to push the black king to the back rank, which is going to prove arduous. There are many ways to achieve this, but it always requires zugzwang.

It is still premature to give up the exchange to win a pawn, e.g. 6.♔d5?! ♔b2 7.♔c6 ♔c2 8.♖g6 ♔c3 9.♖xd6? ♗xd6 10.♔xd6? ♔b4 11.♔c6 ♔a5–+. This variation shows us that it is necessary to push the black king one rank further back.

6...♗g1

6...d5+?! weakens the pawn and makes everything easier: 7.♔c3 d4+ 8.♔c4 ♗a3 9.♖h3 ♗c5 10.♖h5 ♔b2 11.♖xc5 bxc5 12.b6+–.

7.♔c3 ♗d4+ 8.♔c2 ♗c5 9.♖f3 ♗g1

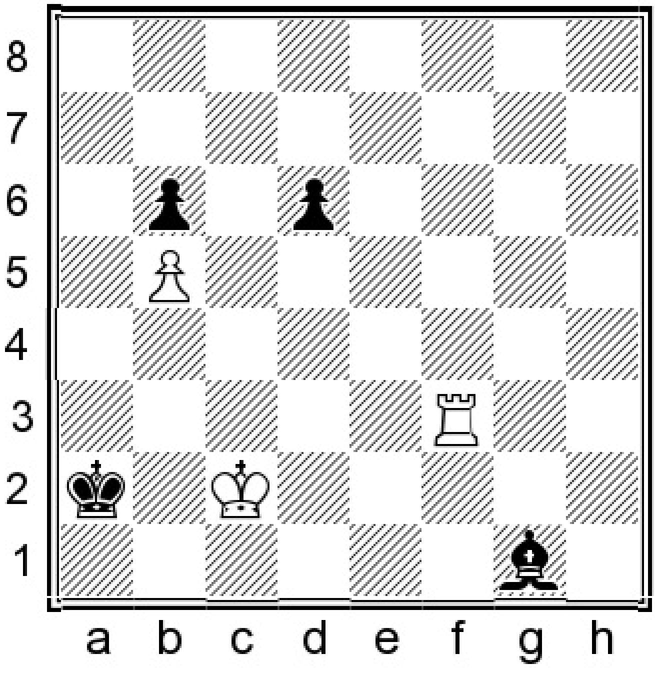
All the other moves also lose:

A) 9...♗a3 10.♖f8+–;

B) 9...♗d4 10.♖f4+–;

C) 9...♗b4 10.♖f8+–;

D) 9...d5 is slightly more tenacious, but after 10.♖d3! d4 11.♖f3 ♗b4 12.♔d3 ♗c3 13.♔c4, followed by ♖g6, one of the pawns will fall, and later the other one will be lost as well, of course.



10.♔c3! ♗c5

10...♔a3 11.♖f1+–; 10...d5 11.♖d3 d4+ 12.♔c4+–.

11.♖f8

Finally the black king is unable to avoid being pushed back onto the first rank.

11...♔b1 12.♖a8!

Before advancing with the king, White needs to ensure that the black king is imprisoned on the back rank.

12...♗e3 13.♔b3 ♔c1 14.♖a2!

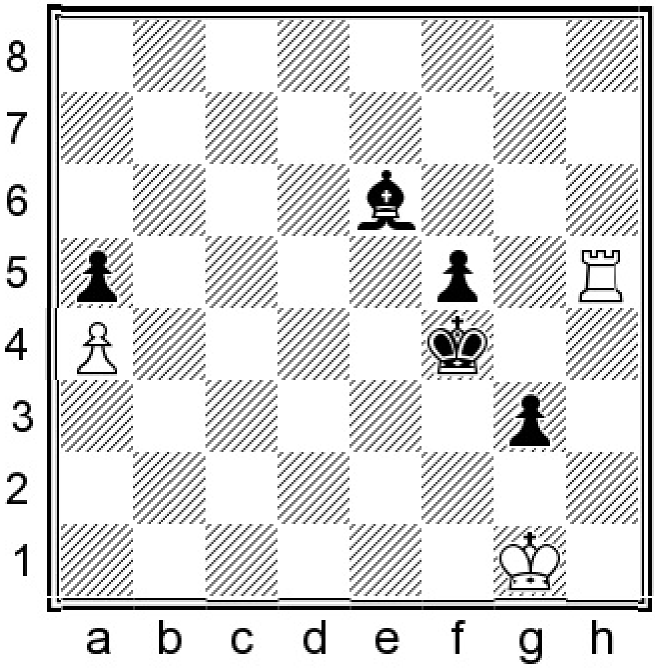
Finally the black king is trapped and the white king can head for the c6-square. Then the rook will come and capture the pawns.

14...♗c5 15.♖h2 ♔d1 16.♔c4 ♔c1 17.♔d5 ♔b1 18.♖h6 ♔c2 19.♖xd6 ♗xd6 20.♔xd6 ♔c3 21.♔c6 ♔c4 22.♔xb6 1-0

Pattern 80 Two connected passed pawns

The struggle of a rook against a bishop and two connected passed pawns occurs quite frequently. If the pawns are organised, which means that they are supported by their king and are not fixed on the wrong colour, they usually win, but the rook's resources are much greater than is immediately apparent. In all the cases there are tremendous tactical struggles, enjoyable to play and to analyse.

Paul Keres
Gideon Stahlberg
Gothenburg 1938 (3)



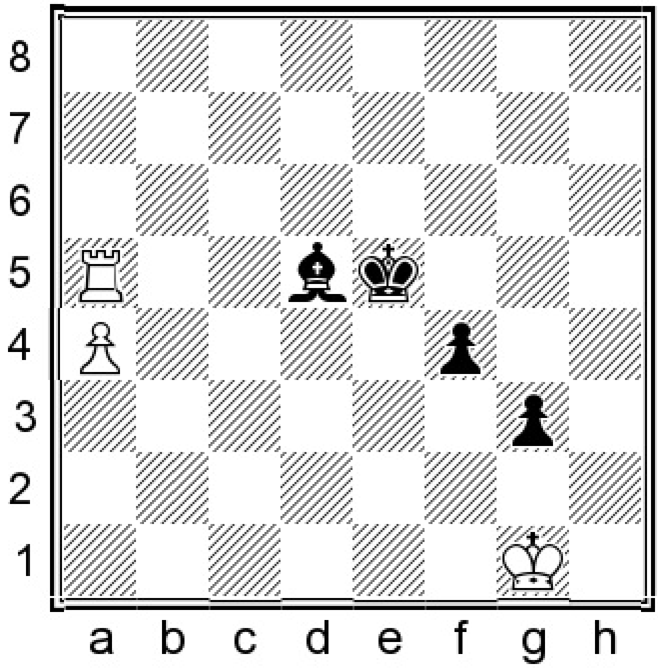
White to move

I would say this ending especially illustrates the defensive resources of the rook. Although the pawns appear to be perfectly organised, with the most advanced one on the correct colour and the king in close support, the position should end in a draw. It is true that the rook is stronger for capturing loose pawns such as the black pawn on a5.

46.♖h6 ♗d5 47.♖a6?

White goes wrong quite quickly and this is normal, because it is difficult to believe that there can be a better move than this. The key is to play 47.♖g6! first, forcing the black king (now or within the next few moves) to go to f3, which disrupts the perfect coordination with his bishop: 47...♔f3 48.♖a6!. Now we shall soon see the difference with the game: 48...f4 49.♖xa5 ♔e4 (the king is unable to defend the bishop from the e5-square) 50.♔g2! ♔d4+ 51.♔h3!. The white king controls the pawns from the side and prevents both of them from advancing, one because the other would be captured, and the other because the pawns would end up in the classic blockade position: 51...♗e4 52.♖g5 ♔e3 53.♖xg3+, eliminating both pawns in time.

47...♔e5! 48.♖xa5 f4



Now both pawns have secured access to the sixth rank and Black will be threatening ...f4-f3-f2, because the rook’s routes to the squares f8 and f7 are barred.

49.♖c5 f3 50.a5 ♔d4

Black has to break the pin.

51.♖c8 ♗e4!

Threatening 52...f2 and 53...♗d3, preventing the sacrifice of the rook. For example, if 51...♗c4? then

52.♖xc4+ ♔xc4 53.a6 and Black achieves only a draw.

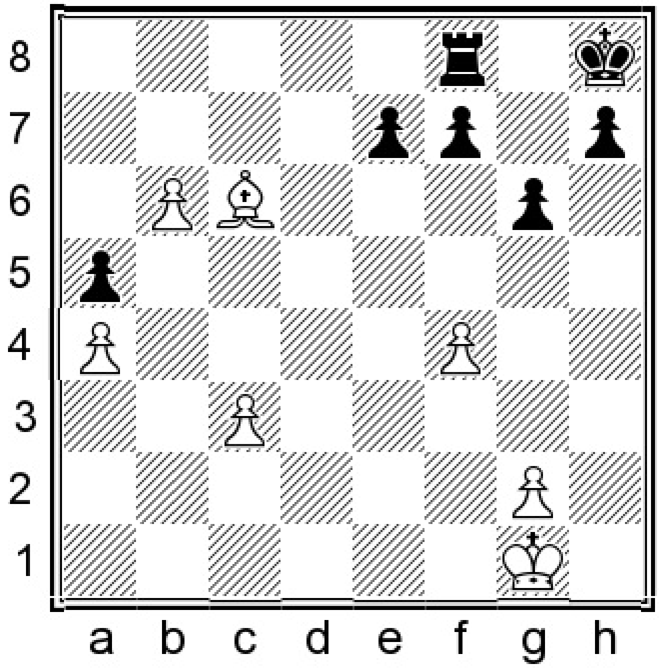
52.♖c1 ♗d3! 53.♖a1 ♗a6! 54.♖a2 ♔e3 55.♖a3+ ♔f4

55...♗d3! was the quickest finish: 56.♖a1 ♗c4 57.a6 ♗d5 58.♖a3+ ♔e2 and White is unable to play 59.♖a2.

56.♔h1 ♗b7 57.♖a4+ ♔g5 0-1

The following position arose in a rapid game by the author; it was neither important nor profound, but it definitely merits analysis.

Analysis position



Black to move

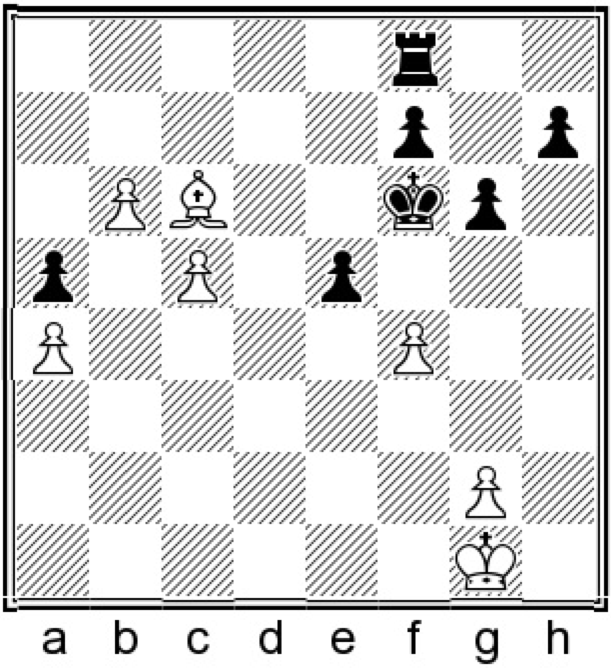
1...♖b8!!

This is the only correct and winning move. Everything else loses. It is essential to force the b-pawn to advance to a square of the same colour as the bishop, which will then allow the pawns to be blockaded. It is no coincidence that this idea is similar to the one in the previous section. It is essential to make the bishop bad, so that the squares of the opposite colour are weak, and this principle is more important in the struggle of bishop vs rook or knight than against another bishop.

Let's examine the other two logical alternatives. The comparison is instructive:

A) 1...♖c8? 2.b7 – necessary, and now there are two alternatives: 2...♖b8 (2...♖d8 cuts off the white king, but allows a decisive promotion combination: 3.c4! ♔g7 4.c5 ♔f6 5.♗d7!+–) 3.♔f2! (now the white king arrives sooner) 3...♔g7 4.♔e3 ♔f6 5.♔d4 h6 6.♔c5 g5 7.fxg5+ hxg5 8.♔b6+–. The result of the analysis of this line suggests that Black can save himself if he can gain a tempo somehow, which leads us to hope that the move ...♖b8 might be better;

B) 1...♔g7?. The king march towards the passed pawns is a principle that we have proved to be useful many times, but here it is not going to work: 2.c4 (for White the decision is easier: it is a matter of advancing the passed pawns until the winning formation is reached) 2...♔f6 (now it is too late for 2...♖c8 3.♗d7 ♖xc4 4.b7 ♖b4 5.♗b5) 3.c5 e5! (3...♔e6 brings the king very close, but now it is unable to get any closer and White can make progress with his king, before supporting the final advance of the winning pair with his bishop: 4.♔f2 ♖d8 5.♔e3 h6 6.♗f3+–, followed by c5-c6-c7)



analysis diagram

4.♗b7!! ♔e6 (4...exf4 5.♗c8! gains a decisive tempo, preventing the arrival of the black king) 5.fxe5! ♔xe5 6.c6 ♔d6 7.c7. The rook is lost, but Black has a choice between waiting for the pawn ending (with the king on d7) and playing the ending a piece down; unfortunately for Black, both options lose: 7...♔c5! (7...♔d7 has the snag that it does not threaten anything: 8.♔f2! h5 9.♔e3 g5 10.♔d4 h4 11.♔c5 g4 12.♗c6++–) 8.c8=♕+ ♖xc8 9.♗xc8 ♔xb6 10.♔f2 (an ending is reached with two pawns for the piece, but the white pawn on a4 is a very good one) 10...f6 11.♔e3 ♔c5 12.♔e4 ♔b4 13.♗d7 ♔c5 14.♗e8 ♔c4 15.♗c6 ♔c5 16.♗b5 (zugzwang. The white king's entry can no longer be prevented) 16...♔d6 17.♔d4 f5 18.♗e2 h6 19.♔c4 ♔c6 20.♗f3+ ♔b6 21.♔d5+–.

1...♖b8!! 2.b7 ♔g7

Now the king easily reaches c7 and frees the rook from its thankless task as a blockader.

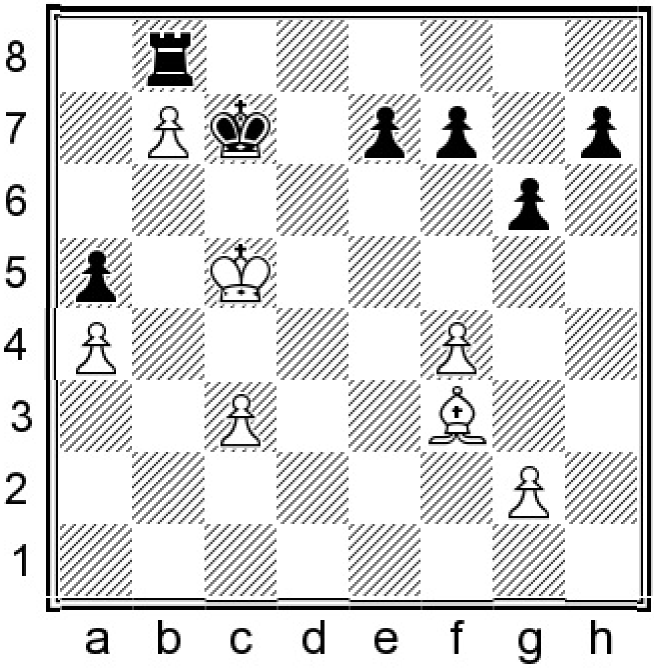
3.♔f2

It is essential to bring the king closer. The advance of the second pawn comes too late: 3.c4 ♔f6 4.c5 e6 5.♗f3 ♔e7 6.c6 ♔d6–+.

3...♔f6 4.♔e3 ♔e6 5.♔d4 ♔d6 6.♗f3 ♔c7

The black king has arrived to deal with the passed pawns. The rook is now free.

7.♔c5



7...♖d8

Before creating his own passed pawns, Black cuts off the return of the white king and prepares a devastating attack on the mainstay of the white position.

8.♔b5 ♖d3! 9.♔a6

If 9.c4 ♖xf3! 10.gxf3 ♔xb7 and the h-pawn will queen.

9...♔b8 10.c4

Now the immediate exchange sacrifice does not win.

10...♖c3! 11.♔b5 ♖xf3! 12.gxf3 ♔b7

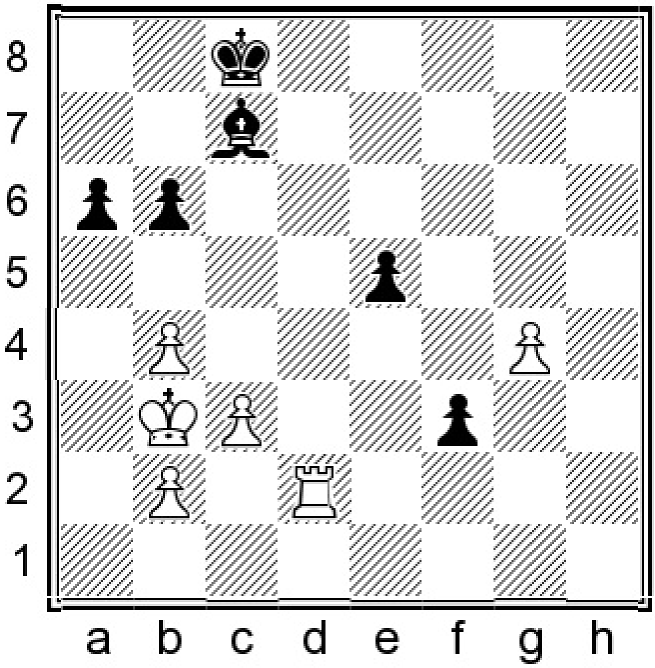
Reaching a winning pawn ending.

Conclusion

The position (which was quite easy to lose) was winning for Black. The basic principle that we have discovered is that the pawns are easier to blockade if they advance onto the wrong colour (the same as in endings of opposite-coloured bishops, or bishop vs knight).

But we can also deduce this principle from classic endings.

Alexander Alekhine
Savielly Tartakower
Vienna 1922



White to move

With the arrival of the engines, many classic games, with very brilliant analysis, have been refuted. But that is not the case with this extraordinary ending by Alekhine.

36.♖d5!!

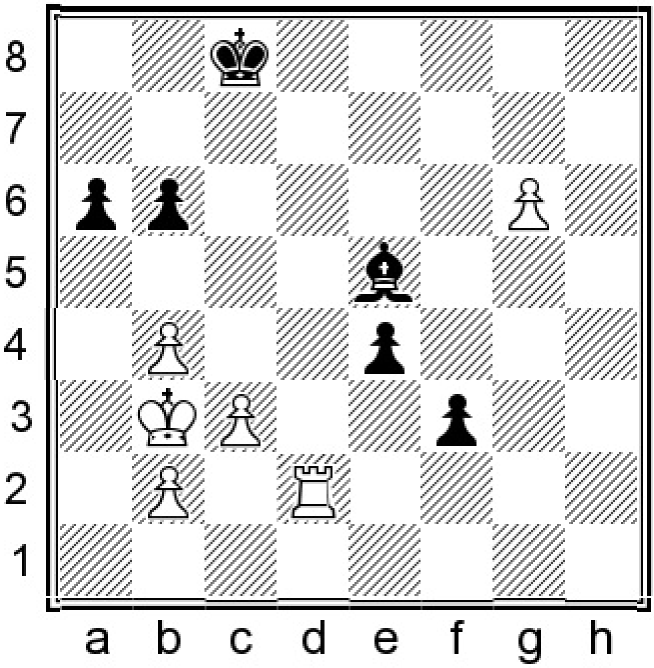
After seeing this move, everything becomes clear and the variations, as we shall see, are simple, but first we shall analyse the alternatives. It is surprising to discover that none of them win:

A) 36.♔c4? and the king is too late: 36...e4! 37.♔d4 ♗f4 38.♖f2? e3! 39.♖xf3 e2 and the pawn queens;

B) 36.♔c2?! – this way the king gets closer, but it is not sufficient to win: 36...e4 37.♖d4! e3 38.♔d3 e2 39.♔d2 ♗g3! 40.♖e4 ♗h4!=;

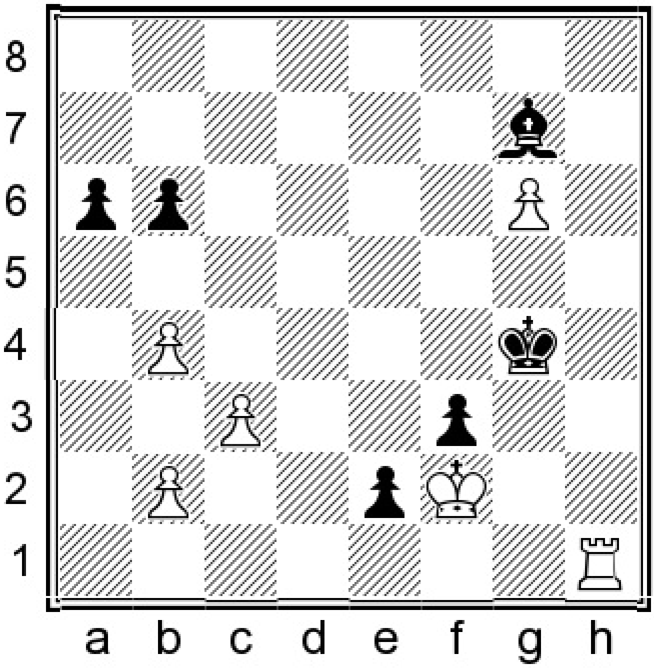
C) 36.♖h2!? is the most promising alternative: 36...e4 37.♖h8+ ♔d7 38.♖f8 and the white rook arrives behind the pawn with one tempo less than in the game continuation: 38...♗g3! 39.g5 ♔e7 40.♖f5 ♔e6 41.g6 (41.♖f8 ♔e7 repeats the position) 41...♔xf5 42.g7 e3 (there is no need to rush with 42...f2?? 43.g8=♕ f1=♕ 44.♕f7+, losing the queen) 43.g8=♕ ♗f4 and White cannot win;

D) 36.g5!? e4 37.g6 ♗e5.



analysis diagram

Here, in one of his rare errors in analysis, Alekhine says that this move, followed by ...e4-e3, wins for Black, but he was unable to analyse it with the aid of Houdini, despite the fact that when this game was played the famous escape artist was in fine form: 38.♖f2! ♔d7 39.♔c2 ♔e6 40.♖f1 ♔f5 41.♖g1 ♗g7 42.♔d2 ♔f4 43.♖h1 e3+ 44.♔e1 e2 45.♔f2 ♔g4 produces an extraordinary zugzwang position which would deserve to be included in the list of surprising positions in the section dedicated to endings at the start of the book.



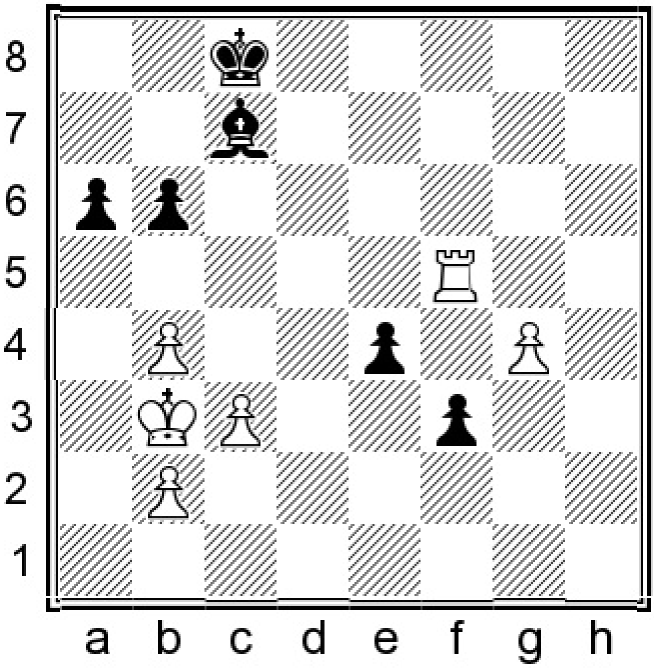
analysis diagram

In this case I suggest that the reader should do the mental exercise of seeing what happens with each white move, and what would happen if White could lose a move at one point.

36.♖d5!! e4

36...f2 arranges the pawns in the harmless formation seen in the previous example: 37.♖d1! e4 38.♔c2 ♗f4 (38...e3 39.♔d3+–) 39.♖f1 e3 40.♔d3 and the white king has arrived in time to blockade the pawns.

37.♖f5!



The rook moves behind the most advanced pawn and renders both pawns harmless; but it was necessary to calculate the following variation accurately..

37...♗g3!

Preventing the white king from approaching in time. But now White wins thanks to his g4-pawn:

38.g5!

Here 38.♔c2? would be a serious mistake: 38...e3! 39.♖xf3 e2 and Black is better!

38...♔d7

Now 38...e3 loses to 39.♖xf3 e2 40.♖e3 e1=♕ 41.♖xe1 ♗xe1 42.g6 and the g-pawn queens.

39.g6 ♔e6 40.g7 ♔xf5 41.g8=♕ ♗f4 42.♕f7+ ♔g4 43.♕g6+ ♗g5 44.♕xe4+ ♔g3 45.♕g6 ♔g4

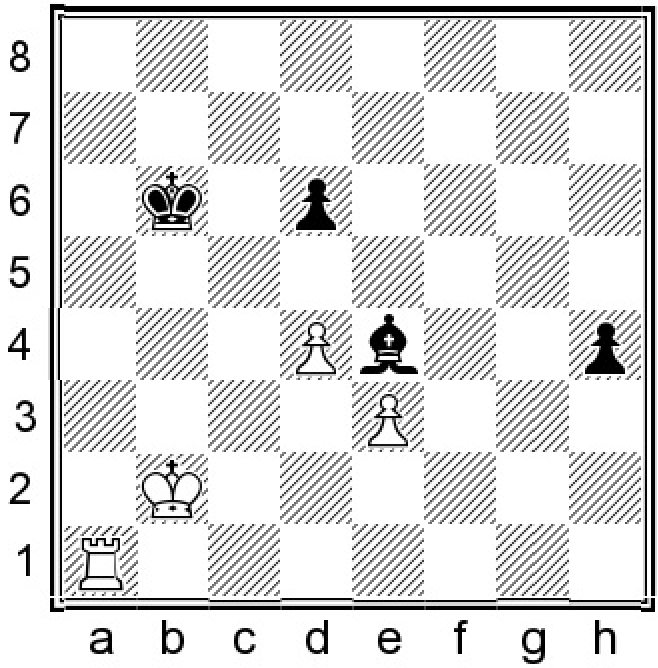
46.♕xb6

Black resigned.

Conclusion of these two endings

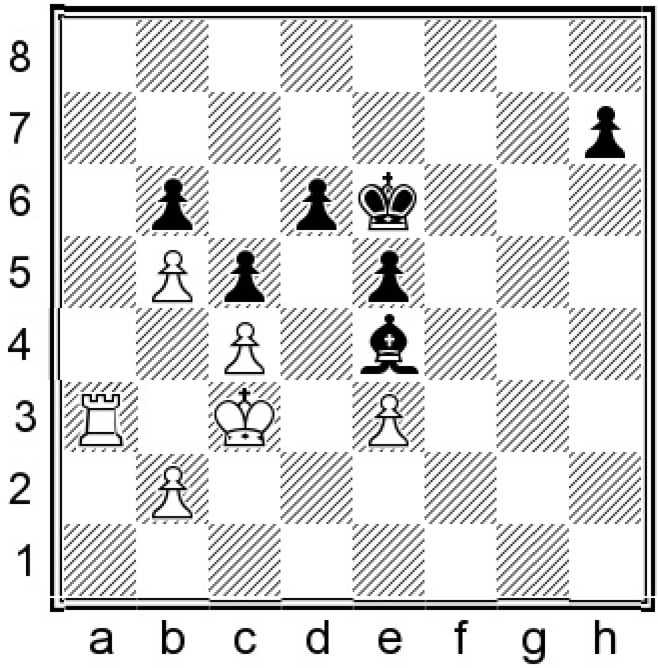
Two passed pawns supported by a bishop are much less dangerous if they are placed on squares of the same colour as the bishop.

Pattern 81 The awkward rook's pawn



There is no reason why a rook's pawn should be awkward for a rook, which can cover the whole board in two moves. However, when supported by a bishop which controls the promotion square, the rook can quite often encounter difficulties in stopping the pawn. This is a theme that arises less frequently than others, but it is an attractive and quite useful one.

Analysis position 2020



Black to move

There are many circumstances in which a passed pawn can become difficult for the opposing side to stop; and some of them recur with some regularity. In the case of the struggle of a rook against a bishop, it sometimes happens that a bishop situated on the long diagonal together with a rook's pawn can pose problems for the enemy rook.

The diagram position represents an idealised scheme in which all the obstacles faced by the rook can be perceived. We are going to enumerate them one by one. First of all, the rook cannot access the a8-square in order to locate itself behind the pawn. Neither can it achieve this in two tempi by the manoeuvre ♖a7-h7, because the h7-square is also guarded by the bishop. These first two circumstances mean that the rook would take four moves to get behind the pawn. The rook can reach h2 to position itself in front of the pawn, but in this case, if we try to use the king to stop the pawn, we find that when the white monarch arrives at f2, it cannot access g2 due to the position of the bishop, so it needs an extra tempo to enter the square of the pawn.

In summary, if it is Black to move, he wins by advancing his pawn; on the other hand, if it is White to move (with an extra tempo) he can stop the pawn in various ways:

1...h5! 2.♖a1

Initiating the only manoeuvre that prevents Black from advancing his pawn five times running.

A) 2.♔d2 h4 3.♔e1 h3 4.♔f2 h2–+;

B) 2.♖a7 h4 3.♖g7 h3 4.♖g3 h2 5.♖h3 h1=♕–+;

C) 2.♖a6 h4 3.♖xb6 h3 4.♖b8 h2 5.♖h8–+.

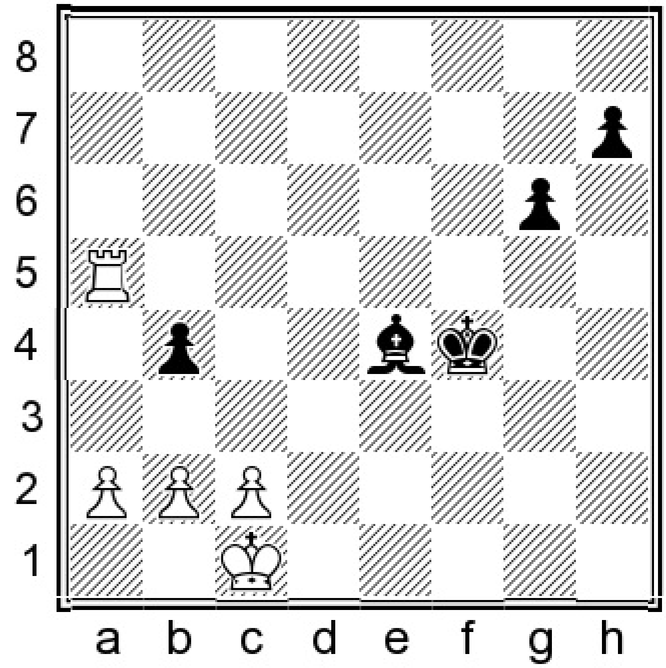
2...h4 3.♖f1 h3 4.♖f2

But the attempt to halt the pawn on the sixth rank is met with a typical reply:

4...♗g2!–+

The bishop acts as a screen and the pawn cannot be stopped.

Boris Kreiman
Henk Vedder
Calicut 1993



White to move

White is the exchange up and the degree of advance of the pawns is similar. White should win, or at least should have no problems avoiding loss. But Black’s bishop is situated on the ideal square and his rook’s pawn is very awkward. The result is that White must take care and use the king to stop the black pawn and make a draw:

54.a3?

The move in the game is logical, because it is about running with the pawns, but this is one of the losing moves. There were a couple of moves to draw:

A) 54.♔d2!. A small test shows us that with the king on b1 White would be lost: 54...h5 55.♔e2 h4 56.♔f2 h3 (56...g5 57.♖a7 g4 58.♖f7+ ♗f5 59.a3 bxa3 60.bxa3 g3+ 61.♔g1 h3 – threatening 62...♔g4 – 62.♖f8 ♔g4 63.♖g8+ ♔f3 64.♖h8!=) 57.♔g1 g5 (57...♔g3 58.♖g5+ ♔f4=) 58.♔h2 g4 59.♖a4 ♔f3 60.♖xb4 g3+ 61.♔xh3 ♗f5+ 62.♔h4 g2 63.♖b3+ ♔f2 64.♖g3=;

B) 54.♖a7 h5 (54...g5?! 55.♔d2!, followed by ♖f7 and ♔e3, might even pose problems to Black) 55.♖h7 ♔g3 56.♖e7! ♗f3 57.♖g7!=.

54.a3? h5!

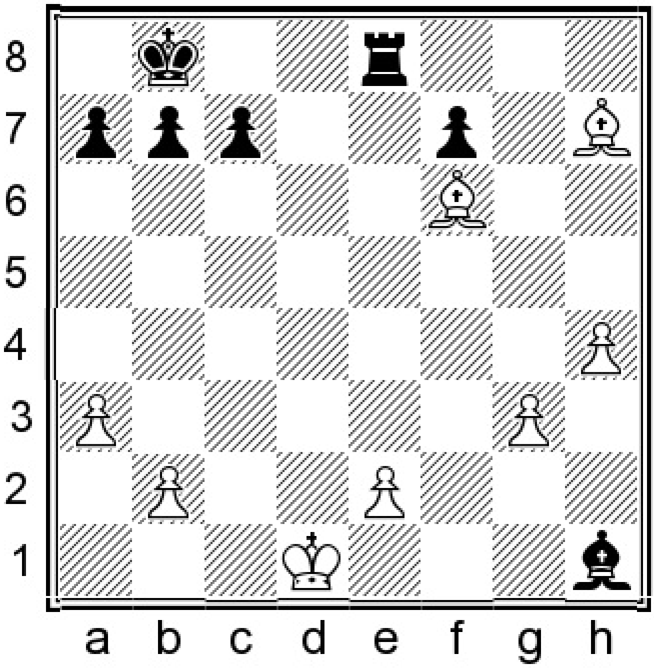
Now the pawn cannot be stopped.

55.axb4

White continues to squander tempi, but with 55.♖a7 White also fails to arrive in time: 55...h4 56.♖h7 g5 57.♖h8 bxa3 58.bxa3 ♔g3 59.♔d2 h3 60.♔e3 ♗g2, followed by ...h3-h2-h1.

55...h4 56.♖a7 g5 57.♖f7+ ♔g3 58.♖e7 ♗f3 59.b5 h3 60.♖h7 h2 0-1

Keith Arkell 2350
Martin Hazelton 2145
Southampton ch-BCF 1986 (8)



Black to move

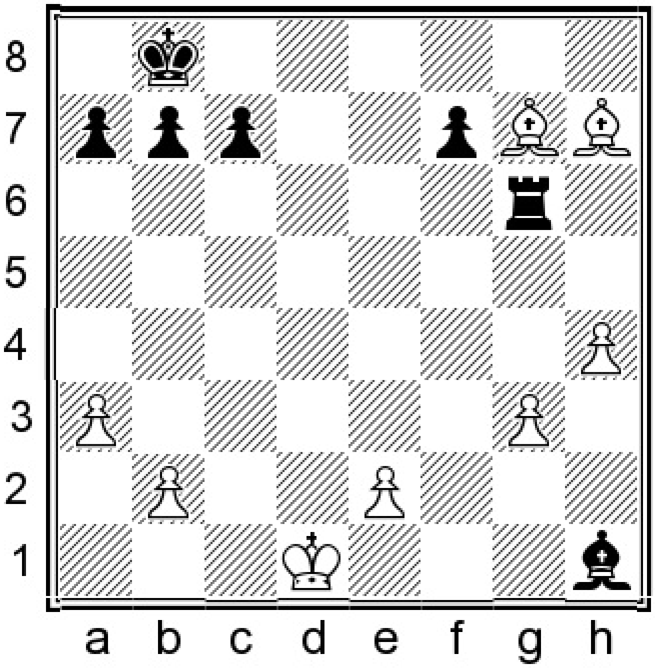
The diagram position (and the subsequent analysis) reflects unusually well the strategic importance of the blockading ability of the pieces. In this case we see how an opposite-coloured bishop can be more effective than a rook at stopping a passed pawn:

24...♗e4?

This is the 'politically correct' move.

The bishop, which is out of play on h1, is exchanged for its excellent counterpart and the bishop pair is eliminated. The rook will handle the passed pawn, but perhaps it is unaware that it is dealing with an 'awkward' pawn. It is difficult to imagine that the rook should take on the task of exchanging itself for the white bishop and that White’s own bishop is the piece best equipped to block the pawn in the resulting position.

24...♖e6! 25.♗g7 ♖g6! and now we consider two variations:



analysis diagram

A) 26.♗e5 threatens to capture under better conditions but allows 26...♖h6! (26...♗e4?! would lead to a slightly worse opposite-coloured bishops endgame, as the white king would gain a tempo by attacking the bishop on e4, but this still seems to draw) 27.♗d3 ♖e6 28.♗g7 ♖g6!, repeating the idea;

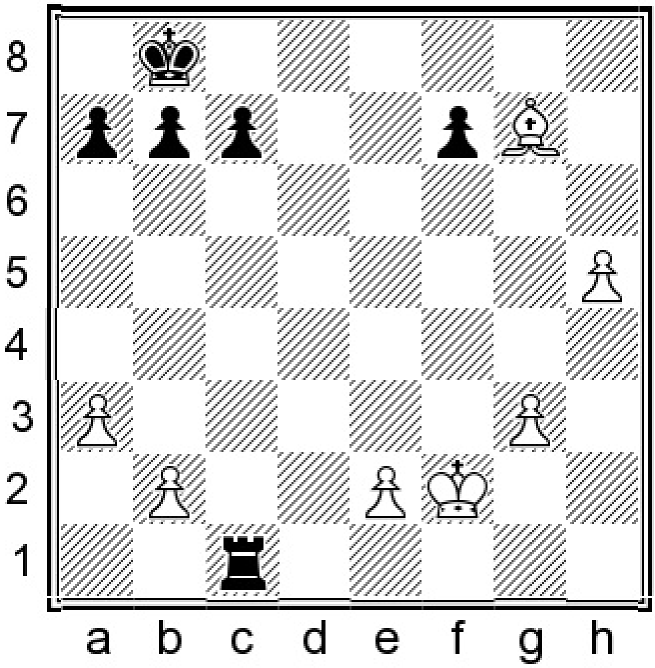
B) 26.♗xg6 fxg6 and the opposite-coloured bishops endgame should be a draw, given that Black can apply a zonal defence very comfortably, e.g. 27.♔d2 ♔c8 28.♔e3 ♔d7 29.♔f4 ♔e6 30.♗e5 c6 31.e4 ♗g2 32.♗d4 b6 33.♗e5 ♗f1 34.♗b8 a6 35.♔e3 ♗c4 36.♗c7 b5 37.♔d4 ♗e2 38.b4 ♔d7 39.♗b8 ♗f3=.

24...♗e4? 25.♗xe4 ♖xe4 26.h5

And once again we have the familiar scheme. Despite its great mobility, its variety of resources and the fact that the pawn is only on the fifth rank, the rook is unable to stop it.

26...♖e6 27.♗g7 ♖d6+ 28.♔e1 ♖c6 29.♔f2! ♖c1

White is probably not convinced of his luck and from here on he shows signs of weakness:



30.♗f6?!

A) 30.g4! would have eliminated all the rook’s options for getting behind the pawn, e.g. 30...♔c8 31.♗f6 ♖h1 32.♔g2;

B) 30.♔g2? is not as good, due to 30...♖c5.

30...♖c6

30...♖h1 31.g4; 30...♔c8 31.h6 (31.♔g2 ♔d7 32.h6).

31.♗g7 ♖c1 32.g4

Seemingly getting back on the right track.

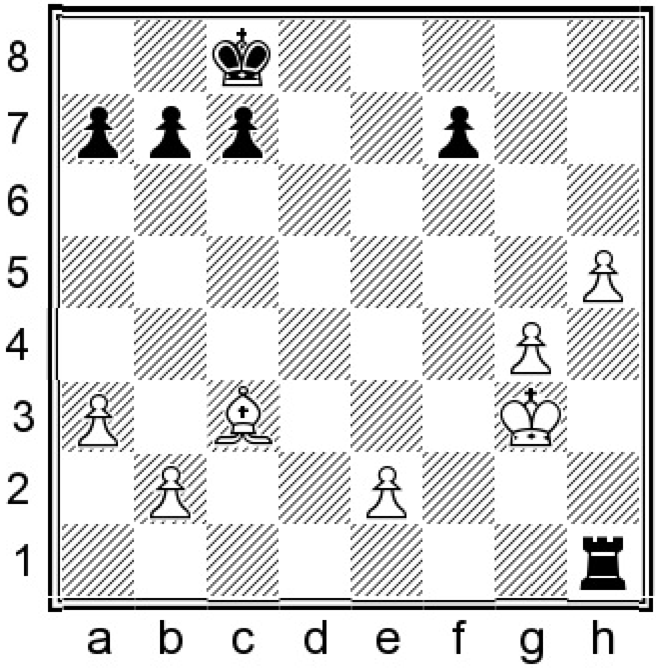
32...♔c8 33.♗c3?

33.♗f6 ♖h1 34.♔g2+–.

33...♖h1?

Black offers White a fresh opportunity. The correct plan was 33...♔d7! 34.♔g2 ♖c2 35.h6 ♖xe2+ 36.♔g1 ♖e4 37.h7 ♖xg4+ 38.♔f2 ♖h4 39.h8=♕ ♖h8 and Black should be able to draw.

34.♔g2? ♖h4 35.♔g3 ♖h1



36.♔f4?

Finally White wastes his last opportunity to force the advance of the pawn. The correct move was 36.♗f6!, controlling the h4-square and threatening to eject the rook with the king on g2: 36...♖f1 37.♗g5! (this truly is a difficult move) 37...♔d7 (37...f6 38.♔g2) 38.h6 and now there is no way to stop the pawn.

36...c5 37.♔g5 ♔d7 38.♔h6 ♔e6 39.♔h7 ♖h4 40.h6 f6 ½-½

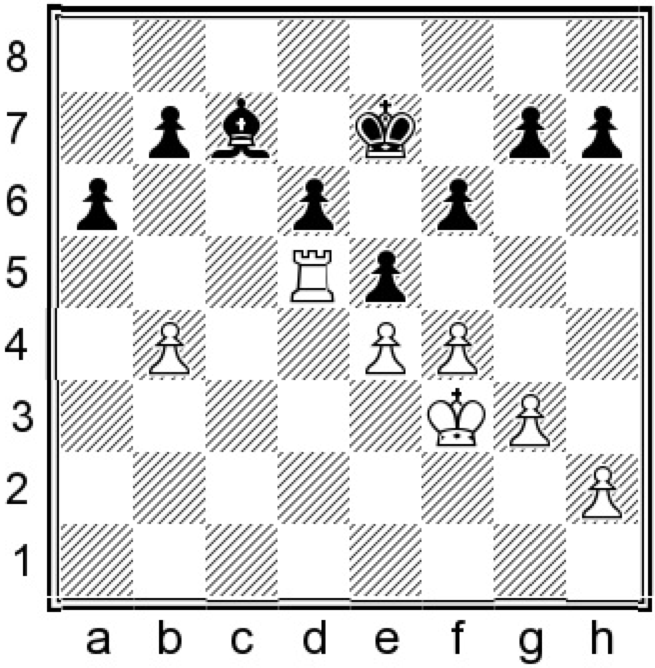
Black settled for a draw with this move, although he could have played on with 40...♖xg4.

Pattern 82 Pawns on both wings

When there are pawns on both wings, a rook is clearly superior to a minor piece, and can win even when a pawn or even two pawns down, as long as there is no passed pawn. The main problem that usually arises is entering the enemy position with the rook and the king, hence the position of the defending side acquires some of the characteristics of a fortress. We are going to see one example in which the lines can be breached and another, seemingly more advantageous, in which a fortress can be constructed.

We shall begin with a modern game, played at a high level.

Peter Leko 2741
Alexei Shirov 2741
Moscow 2008 (3)



White to move

Black has two pawns for the exchange, which is usually enough, but in this case none of his pawns is dangerous. The only problem for White is how to invade the enemy camp with his king or his rook.

30.♖d1 ♗b6

Black very understandably opts to stick to trench warfare. Opening up the game, with the intention of exchanging some pawns, might have made it easier for the rook to invade the back rank, e.g.: 30...exf4 31.gxf4 g6 32.h4 a5 – exchanging another pawn – 33.bxa5 ♗xa5 34.h5 gxh5 35.♖h1 and the rook will easily attack the weak black pawns.

31.♔e2 ♗d4 32.♔d3 ♔d7 33.f5!

Fixing the g7-pawn for the future.

33...♗b6

33...♔c6 34.♖c1+ ♔d7 35.g4±.

34.♖c1 ♗d4 35.♖c2 ♗b6 36.g4

White improves his kingside as much as possible, before striking the decisive blow on the other wing.

36...h6 37.h4

Threatening 38.g5.

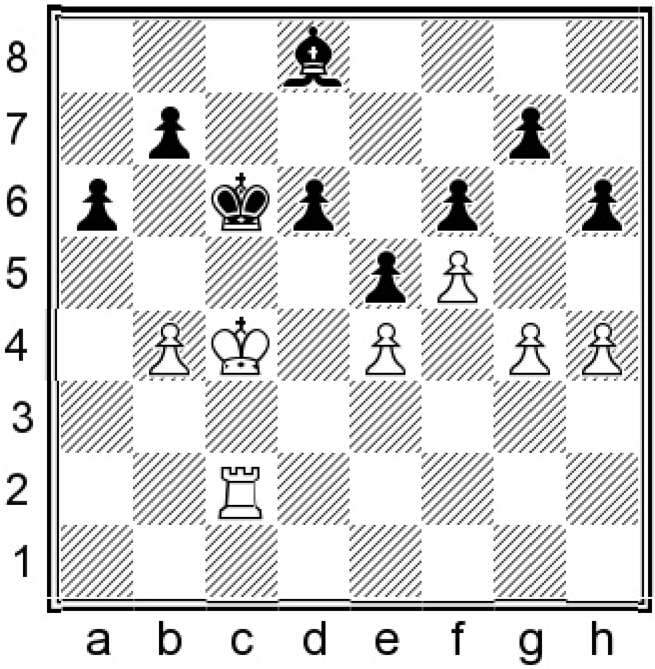
37...♗d8

Necessary to prevent 38.g5. Now the black pieces are too passive, but if 37...♗d4 38.g5! hxg5 39.hxg5 fxg5 (39...♗b6 40.g6+–) 40.♖g2 ♔e7 41.♖xg5 ♔f7 42.♖g6 the black pawns start to fall.

38.♔c4 ♔c6 39.♔b3+ ♔d7

Not 39...♔b5 due to 40.♖c8+–.

40.♔c4 ♔c6



Finally Leko decides to make the pawn break which gains entry to the enemy position, although temporarily he will be left three pawns down.

41.b5+! axb5+

41...♔b6 42.bxa6 bxa6 43.♔d5+–; 41...♔d7 42.bxa6 bxa6 43.♔d5+–.

42.♔b4+ ♔d7

42...♔b6 is also losing, but perhaps offers a few more tricks: 43.♖c8 ♗c7 44.♖e8! (44.♖g8? looks obvious and yet it would allow quick counterplay with 44...d5! 45.exd5 e4 46.♖e8 (46.♖xg7? e3 47.♔c3 b4+ 48.♔d3 b3 and one of the black pawns queens) 46...♗e5 47.♖c8 e3 48.♖c2=) 44...♔c6 45.♖e7 ♗b8 46.♖xg7 d5 47.exd5+ ♔xd5 48.♖xb7+–.

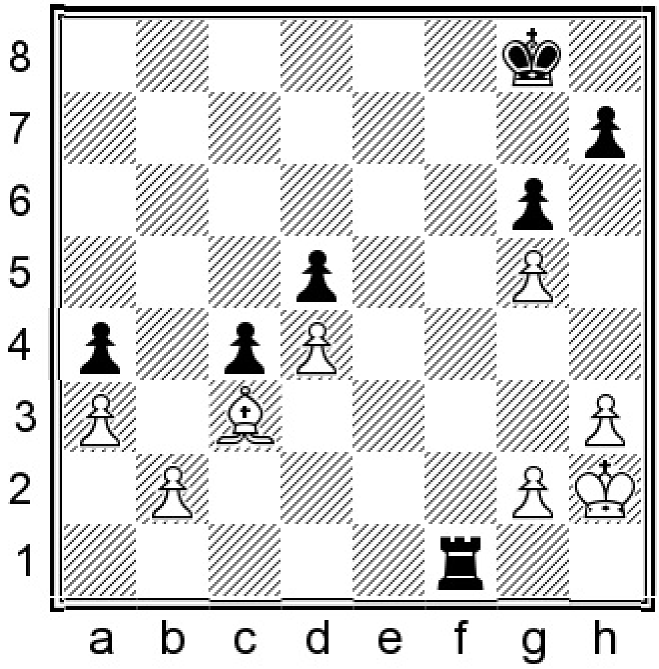
43.♔xb5 ♗e7 44.♖d2 ♔c7 45.♖d1 1-0

Black did not want to wait to see the arrival of the white rook on his back rank, e.g. 45...♗d8 46.♖a1

♔d7 (46...♔b8 allows the white king to enter via the *highway* of light squares: 47.♔c4 ♗b6 48.♔d5 ♗f2 49.♔xd6 ♗xh4 50.♖c1 ♗g5 51.♖c7+–) 47.♖a8+–.

And now a game from the romantic era of chess.

Joseph Blackburne
James Mason
Nuremberg 1883 (11)



Black to move

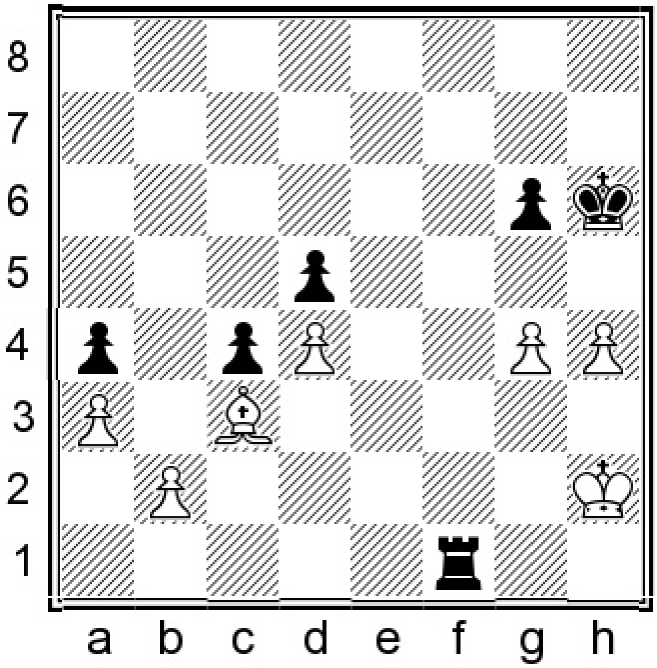
As we saw earlier, in positions with pawns on both wings, where the side with the bishop has no passed pawns, almost everything comes down to whether the stronger side can find a way in for his pieces (especially the king). In this old game, Black managed to win in an interesting manner, but only after White squandered the chance to create a beautiful fortress, worthy of a composed study:

55...h5

Instead, 55...h6 would have been no more effective at opening lines – let us see: 56.gxh6 ♔h7 (56...g5 57.g4=) 57.g4 ♔xh6 58.♔g2 ♖d1 59.h4, and there is no way for the black king to pass, while the white king suffices to defend its kingside and the bishop will not move from its position as both blockader and defender of the queenside.

55...h5 56.g4?

White thinks that he will be able to build a fortress like his, when really he is destroying it. The right way was 56.gxh6! ♔h7 57.g4=, and now 57...♔xh6 (57...g5 58.♔g2 is also a fortress) 58.h4.



analysis diagram

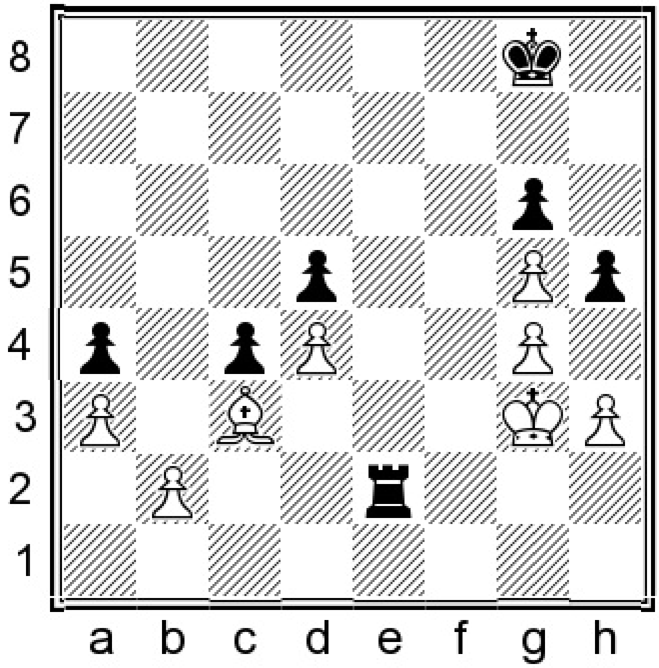
White has constructed an impregnable fortress, because the black king has no way in and zugzwang is impossible, e.g. 58...♖f3 59.♔g2 ♖f8 60.♔g3 ♖e8 61.♔g2 ♖e6=.

56...♖f3!

56...h4! also wins, but not 56...hxg4 57.hxg4 with another fortress.

57.♔g2 ♖e3 58.♔h2 ♖e2+ 59.♔g3

With 59.♔g1 the king strays too far from its pawns and after 59...hxg4 60.hxg4 ♖e4 they fall.



59...h4+! 60.♔f3

With no great hopes, but White did not want to give his opponent the chance to put him in an amusing zugzwang with 60.♔xh4 ♖g2–+.

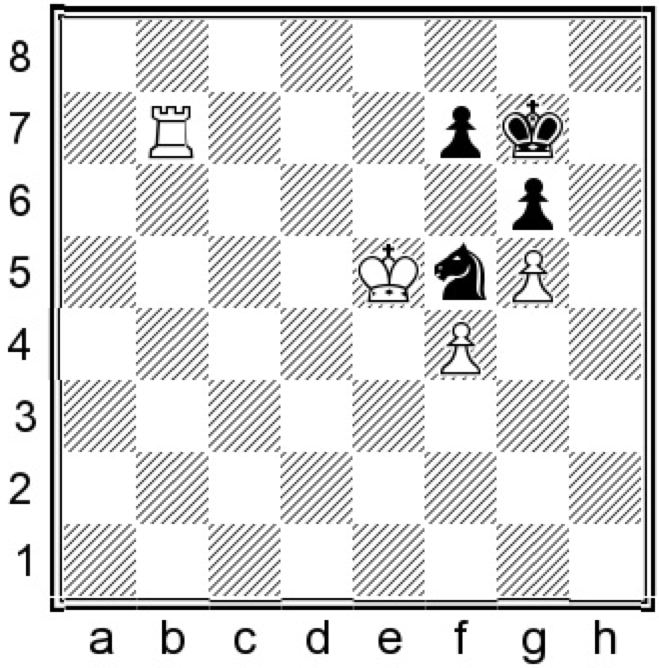
60...♖h2 0-1

Pattern 83 Fortress

With rook vs knight and all the pawns on one wing, the best defensive hope is to construct a fortress. With equal pawns, fortresses are not as common or as solid as one might hope, given the knight's reputation for being able to defend in tight spaces. In the fight against a rook, the knight seems much inferior to the bishop when the defender's pawns are blocked on the correct colour and slightly better than the bishop when the defender's pawns are badly placed. Often the practical problem facing the players comes down to knowing whether a supposed fortress can be breached, and the options are reduced to just three: whether the weakest points can be attacked, whether simplification to a winning pawn ending is feasible, or whether zugzwang is possible.

We shall begin with a supposed fortress which can be found a few times in the databases. There are a few others. We are going to use this one to see the typical procedures for the struggle in these situations.

German Fridstein
Konstantin Klaman
Riga 1954 (4)



White to move

In this case, the weak point of the fortress is the pawn on f7; both white pieces should attack it and therefore the king has to go to e8. It all comes down to seeing whether black can prevent this.

59.♖b8 ♘g3

The knight has to move. If 59...♔h7 60.♔f6+–.

60.♔d6 ♘f5+

A) 60...♘h5 attacks the f4-pawn but the rook can defend it for now, while the king advances: 61.♖b4 ♔f8 62.♔d7+– (zugzwang) 62...♘g3 63.♖b8+ ♔g7 64.♔e8 ♘f5 65.♖b6 ♘e3 66.♖b7;

B) 60...f5 leads to a different structure, which we shall see in the next game.

61.♔d7 ♔h7

61...♘g3!? is equally tenacious. A possible solution then is 62.♔e8!. Other moves also work. The problem comes down to preventing the knight check on d6 at the key moment: 62...♘e4 63.♔e7 ♘g3 64.♖b6 ♘f5+ 65.♔e8 ♔g8 66.♖b1 ♔g7 67.♖d1 ♔g8 68.♖d7+–.

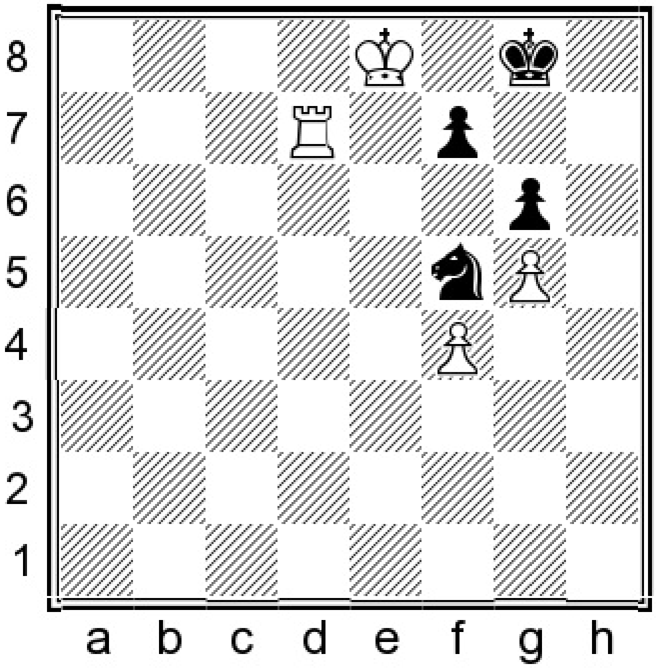
62.♔e8 ♔g8 63.♖d8!

The same problem as before and in essence the same solution: control the d6-square with the rook.

63...♔g7 64.♖d7

Here 64.♖d1 ♔g8 65.♖d7 would have led more quickly and more clearly to a zugzwang.

64...♔g8



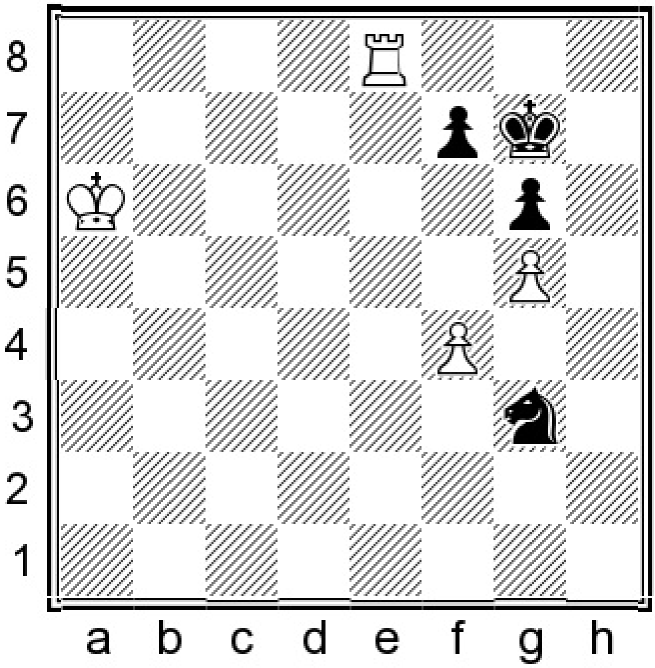
65.♖c7 ♘g7+

65...♘d6+ 66.♔e7 ♘f5+ 67.♔f6 ♘d6 has a quick and rather paradoxical solution: 68.♖c6 ♘e4 69.♔e7 ♘g3 70.f5! (it is interesting to observe that a pawn can be sacrificed to disrupt the knight's defensive circuit) 70...♘f5 71.♔f6 and the f-pawn will fall very quickly.

66.♔e7 ♘f5+ 67.♔f6 ♘d6 68.♖c6 ♘e4+ 69.♔e7 ♔g7 70.♖f6! 1-0

Here we have the same structure as in the previous game, but with the white king very distant:

Detlef Rook 2434
Wolfgang Blank 2452
cr 2010



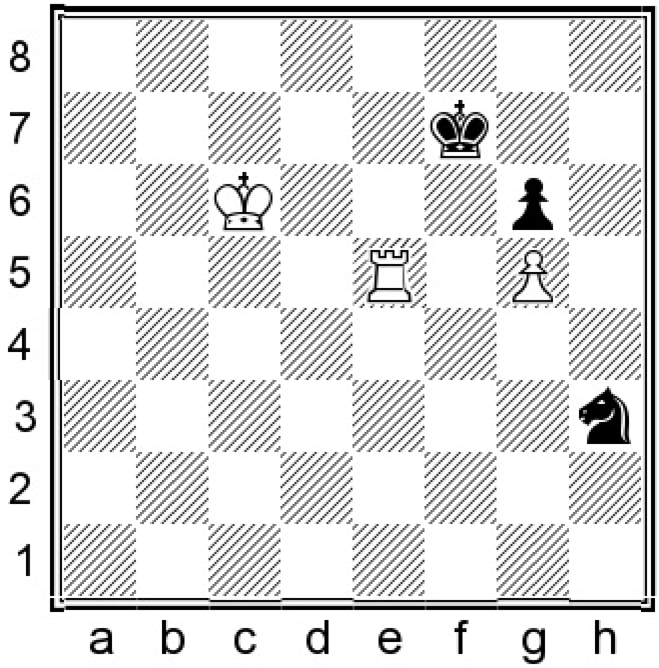
Black to move

Nevertheless, Black cannot eliminate the white pawns – the gradual approach of the white king wins:

73...f5?!

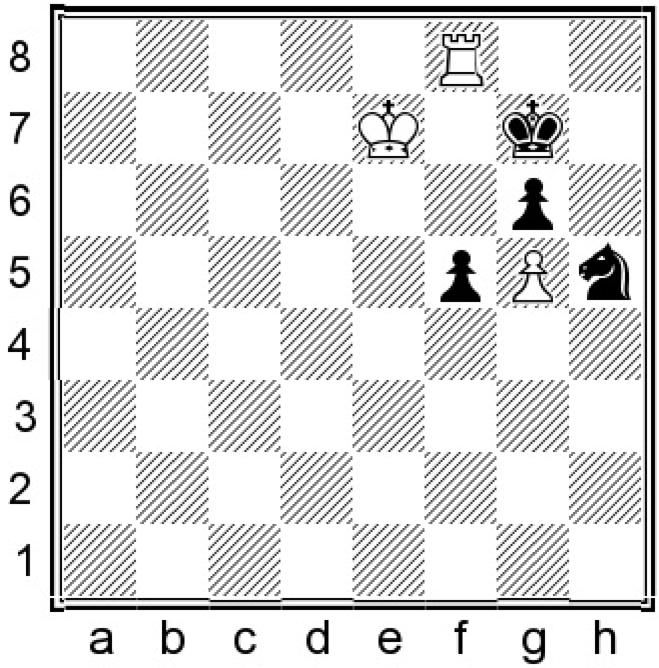
Although in the game this new version of the fortress was successful, this move has a clear snag, allowing the white pieces to infiltrate the black position via e6.

73...f6!? is a more logical plan, trying to exchange one pawn and attack the other one, but the position of the knight is clumsy and the white king arrives in time. Still, at least White has to make some only moves: 74.♖e7+! ♔f8 75.♖e6 (75.gxf6? allows the knight to attack the pawns: 75...♘h5!=) 75...♘h5 (75...fxg5 76.fxg5 ♔f7 77.♖e1! ♘h5 78.♔b5 ♘g7 79.♔c6 ♘e6 80.♖e5+–) 76.♔b5 f5 (this move even wins the f4-pawn, but even so can Black is unable to hold. The alternative variation is the simplest for White: 76...♔g8 77.♔c6 ♘xf4 78.♖xf6 ♘h3 79.♖e6 ♔f7 80.♖e5+–.



analysis diagram

The white king will gradually infiltrate the black position. It is a tedious process to study – since many moves are possible at each moment, but always with the same final result – but nice to play) 77.♔c5 ♘xf4 78.♖e3! (preventing 78...♘h3) 78...♔f7 79.♔d6 ♘h5 80.♖a3 ♘f4 81.♔e5 ♘h5 82.♖a7+ ♔g8 83.♔e6 ♔f8 84.♖h7 ♔g8 85.♖f7 ♔h8 86.♔e7 ♔g8 87.♖f6 ♔g7 88.♖f8.



analysis diagram

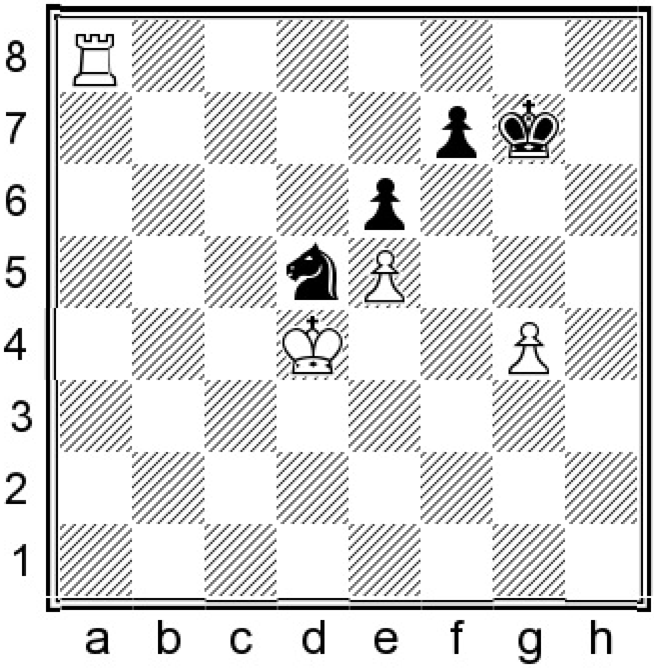
Setting up the decisive zugzwang; the white king will reach the squares f6 or f7 in two moves at most and will then either capture the pawn or deliver mate.

73...f5?! 74.♖c8 ♘e4 75.♔b6 ♔f7 76.♔c6 ♔e7 77.♔d5 ♔f7 78.♖c7+ ½-½

Here White settled for a draw, but Black's resistance could have been broken with the following manoeuvre: 78.♖a8 ♘g3 79.♖a7+ ♔f8 80.♔e5 ♘e4 81.♔e6 ♔g8 82.♖f7 ♘g3 (82...♔h8 83.♖f6 ♔g7 84.♔e7 zugzwang – the king reaches f6) 83.♔f6 ♘h5+ 84.♔xg6 ♘xf4+ 85.♔f6+–.

So it is clear that this position was not a fortress. Now we are going to compare it with another one that definitely is one.

Lubomir Ftacnik 2580
Jon Viktor Gunnarsson 2404
Panormo 2001 (7)



Black to move

Comparing this structure with the previous one, we can easily see that there are several factors in Black's favour: it is possible to defend the weakness (f7) more comfortably and the white pawns are separated and weak. As a result, this fortress is a real one:

54...♘f4!

A good regrouping, although this is not the only move.

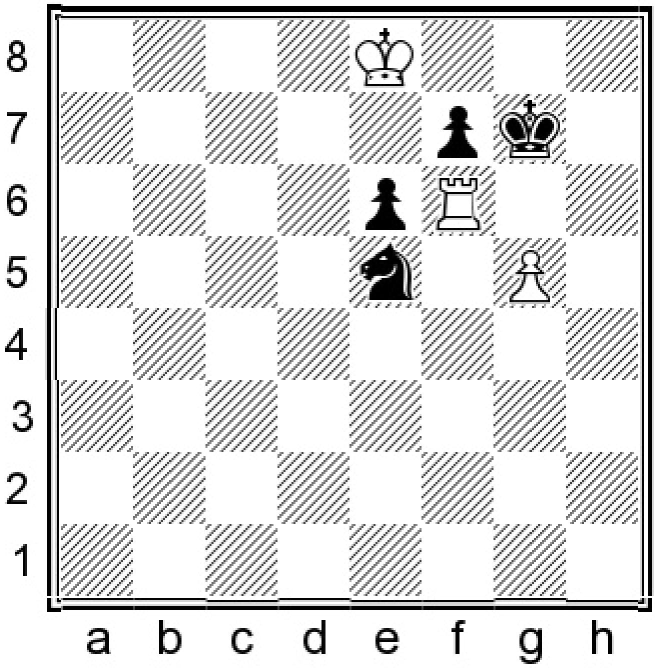
55.♔c5 ♘g6

Black also has the option to counterattack: 55...♘d3+! 56.♔d6 ♔g6 57.♖a3 ♘f2 58.♖a4 ♔g5=.

56.♔d6 ♘f4 57.♖a1 ♘g6 58.♖f1 ♔g8 59.♖f2 ♔g7 60.♖f6 ♘f8 61.♔e7 ♘g6+ 62.♔e8

White opts to sacrifice the e5-pawn, because he is unable to find any way to maintain the pressure.

62...♘xe5 63.g5



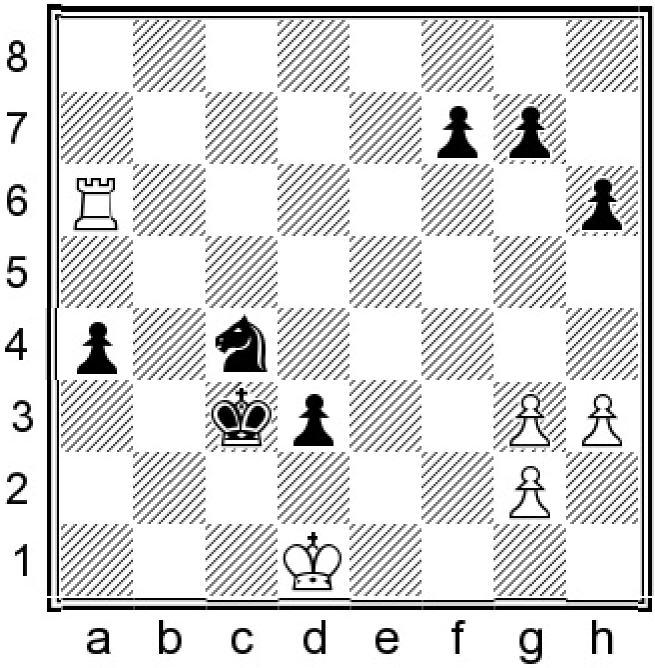
The simplest is to opt for active defence, when precise calculate is possible:

63...♘g4

63...♔g8 also makes a draw.

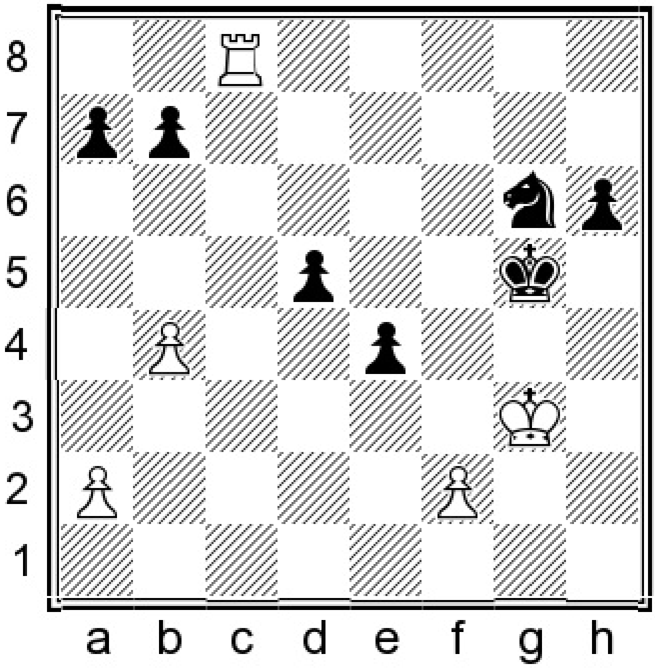
64.♖xf7+ ♔g6 65.♔e7 e5 66.♔e6 ♔xg5 67.♔d5 ♔g6 68.♖f3 ♘f6+ 69.♔xe5 ♘g4+ 70.♔f4 ♘f6 71.♖a3 ♘h5+ 72.♔e5 ♔g5 73.♖a1 ♔g4 74.♖a4+ ♔g3 75.♖a3+ ♔g4 76.♖a8 ♘g3 77.♖g8+ ♔f3 78.♖g7 ♘e2 79.♖f7+ ♔e3 80.♖a7 ♔d3 81.♔d5 ♘c3+ 82.♔c5 ♘e4+ 83.♔b4 ♔d4 ½-½

Pattern 84 Knight with passed pawns



Positions in which the side with the knight also has passed pawns are full of tricks and are more difficult to calculate than when the rook is facing a bishop. The rook is very superior, because normally it can capture a pawn or two before helping to control the enemy passed pawns. Nevertheless it is very easy to get into a tangle, as we shall see again and again in the examples.

Emre Can 2195
David Lariño Nieto 2350
Herceg Novi Ech U16 2005 (6)



White to move

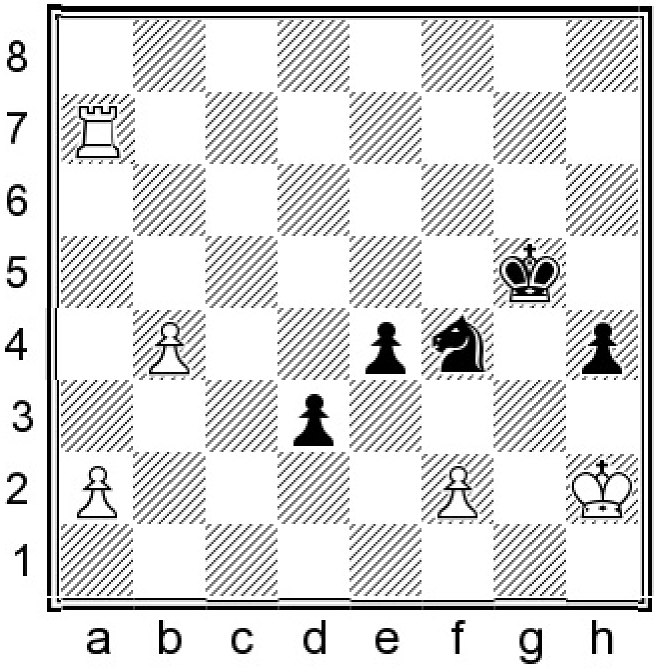
A very tense position. Black has passed pawns on the h- and d-files, but the second of these is the more dangerous one.

37.♖c7!

Correct; the black passed pawns are not very dangerous yet and there is time to capture another pawn or two.

37...h5 38.♖xb7?

However, this capture is a mistake which loses all White's advantage and reduces White to fighting for a draw, but it is a very easy mistake to make. The winning move signifies that it was better to force the knight to change its position, which is not obvious at first sight: 38.♖d7! h4+ 39.♔h2 ♘f4 40.♖xb7 d4 41.♖xa7 d3.



analysis diagram

A) Placing the rook behind the pawn immediately does not work: 42.♖d7? ♔f5 43.b5 ♔e6 44.♖d4 ♔e5 45.♖d8 ♘d5 as the knight 'plugs' the file, which in rook endings we call *building a bridge*. White is suffering here, but still has a resource: 46.a4! d2 47.b6 d1=♕ (47...♘xb6! 48.♖xd2 ♘xa4 49.♔h3 ♘b6 50.♔xh4 ♘d5 and it is not possible to prevent the exchange of the last pawn, with a draw) 48.b7 – Black has no checks and White wins;

B) 42.b5! (the pawn starts its run and the rook will intervene to stop the black passed pawn when necessary) 42...d2. The pawn seems unstoppable, in view of the new plug that Black can create with the knight on d3, but the rook has another route: 43.♖g7+! ♘g6 (this plug deactivates the other one; 43...♔f5 44.♖g1+–) 44.♖d7+–. The black pawn is now stopped and the white one soon queens.

38...h4+ 39.♔h2 d4 40.♖xa7 d3 41.♖d7

With a position similar to the one in the 38. ♖d7 variation, but with the black knight on g6.

41...♘e5 42.♖d5 ♔f6 43.♔g2

43.b5 ♔e6 44.♖d8 ♘d7 (another ‘plug’, and threatening 45...d2) 45.♖g8 ♔f5 46.♖g1 ♔f4 47.♔g2 d2 48.♖d1 e3 49.fxe3+ ♔xe3 and the rook has to be sacrificed for the two black pawns.

43...♘g6 44.♖d6+ ♔f5 45.b5 ♘f4+ 46.♔g1?

After 46.♔h2 ♔e5 47.♖d8 ♘d5 we arrive at a position analysed above, which is a draw, but the feeling is one of danger for White.

46...♔e5 47.♖d7?

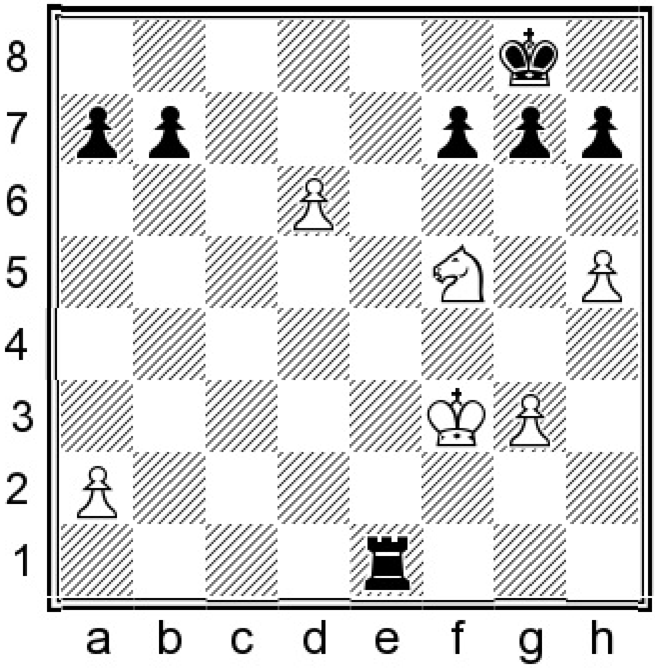
47.♖d8 ♘e6 48.♖d7 ♘d4 49.f4+! exf3 50.♖e7+ ♘e6 51.♖d7 ♘c5 52.♖d8 ♔f4 53.b6 ♔e3 (with the threat of 54...f2, followed by 55...h3) 54.♔f1 h3 and one of the black pawns queens.

47...♔e6! 0-1

After 48.♖d8 ♔e7! the rook has no square available from which it can stop the pawn.

The following position is an example of the knight’s capacity to provoke tactical errors.

Jacques Schwarz
Louis Paulsen
Nuremberg 1883 (18)



Black to move

The position is an easy win for Black, but it turns into a disaster following the natural move

37...♖d1?.

Can there be anything more logical than placing the rook behind the pawn? Well, in fact yes: first guarding against the knight's possible forks and moving the black king out of range. Bringing the king to the centre first is one possible solution and perhaps the simplest: 37...♔f8!–+.

37...♖d1? 38.♔e2!

Now Black discovers that on the entire file there is not a single safe square.

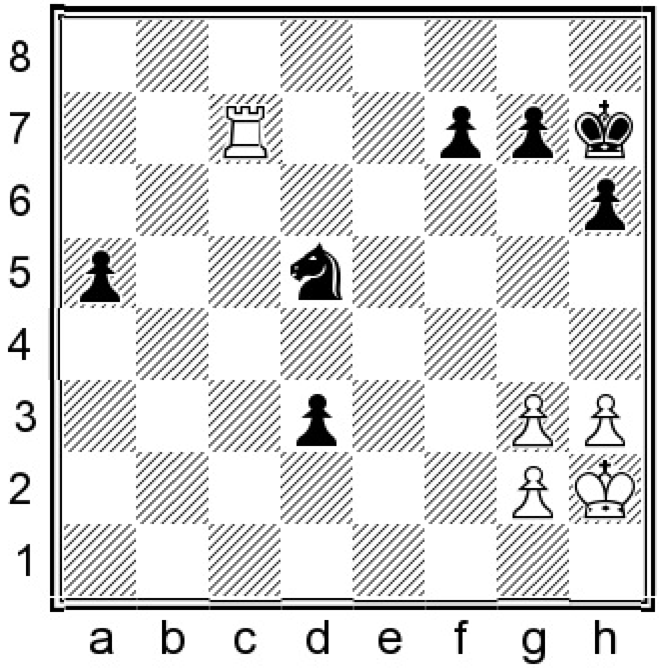
38...♖a1

38...♖d5 39.♘e7+.

39.d7 ♖xa2+ 40.♔e3 ♖a3+ 41.♔e4 ♖a4+ 42.♘d4 f5+ 43.♔e5 ♖a5+ 44.♔d6 1-0

Now we shall see a more complicated situation, but with an equally unexpected result.

Hector Rossetto
Svetozar Gligoric
Havana 1967 (13)



White to move

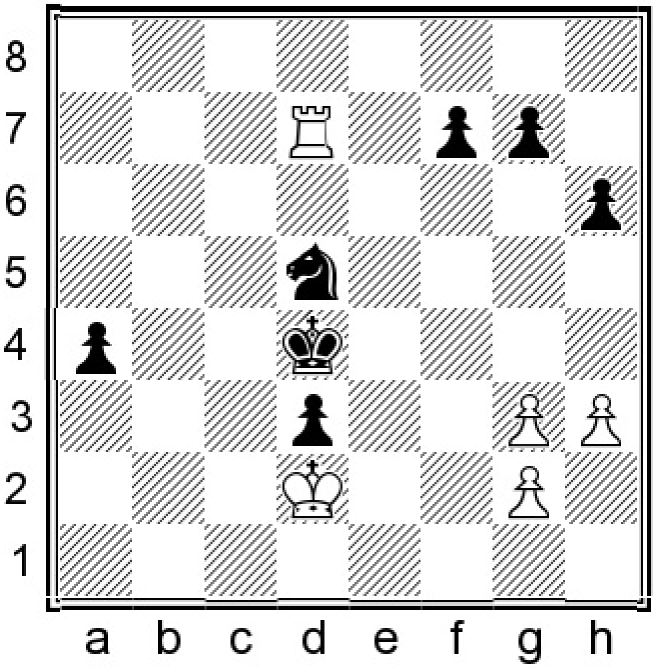
Here the rook is fighting against two passed pawns, although they seem very weak.

28.♖d7 ♘b4 29.♖d4

There is no time to capture the f-pawn: 29.♖xf7? a4 30.♖f4 a3 31.♖xb4 a2 32.♖a4 d2–+.

With the move in the game, the rook prevents the advance of the black pawns and the white king has time to approach and take part in the final act.

29...♔g6 30.♔g1 ♔f5 31.♔f2 ♔e5 32.♖d7 ♘d5 33.♔e1 ♔d4 34.♔d2 a4



A difficult problem for White.

35.♖xf7?

35.♖a7? also loses after 35...♘b6!, when it is not possible to prevent the knight check on c4, followed by the advance of the pawn: 36.♖a6 ♘c4+ 37.♔d1 ♔c3, followed by check with the knight and then with the pawn.

The way to make a draw is worthy of a deep study, although if we consider how to attack Black's weaknesses we can perhaps make a guess: 35.♖b7!! a3 36.♖b3!=.

35...♘f6! 36.♖xg7 ♘e4+ 37.♔c1 ♔e3

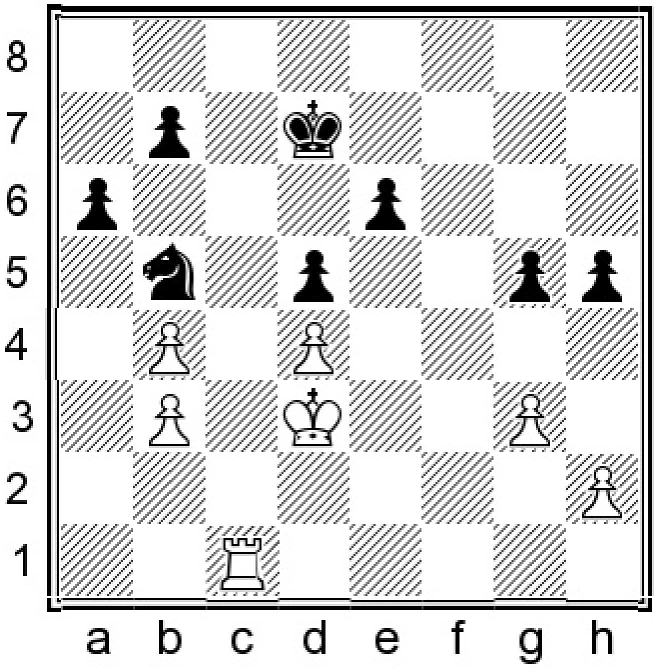
It is worth noting this position and comparing it with the one resulting from move 37 in the previous example, which was also winning. In both cases, the cooperation of king, knight and pawn took the same form.

38.♖d7 a3 39.g4 d2+ 40.♔c2 a2 41.♔b2 ♘f2 0-1

Pattern 85 Pawns on both wings

With pawns on both wings, as was the case against the bishop, the rook's superiority over the knight is very great. Here too the only defence consists of resisting any penetration by the rook and the opposing king, i.e., a concept similar to the fortress, which rarely works across the whole board. There are a few borderline cases and these are interesting.

Aleksandar Matanovic
Bent Larsen
Portoroz izt 1958 (21)



White to move

In this game, White has several invasion routes and he alternates between them until he is able to force an entry:

38.♖e1 ♘d6

To respond to 39.♖e5 with 39...♘f5. If 38...♔e7 39.♖e5 ♔f6 40.h4 and White wins.

39.b5!

A brilliant solution, with a concept similar to the Leko-Shirov game in **Pattern 82**. White sacrifices a pawn but opens invasion routes for his king (the b4-square) and rook (the a-file).

39.♖e5 ♘f5! 40.h3?! would have been a serious mistake, because after 40...g4! the g3-pawn is impossible to defend.

39...axb5

39...♘xb5?! allows 40.♖e5+–.

39...a5 allows 40.b6, followed by ♖c1, and if 40...♘c8 then 41.♖e5+–.

40.♖a1

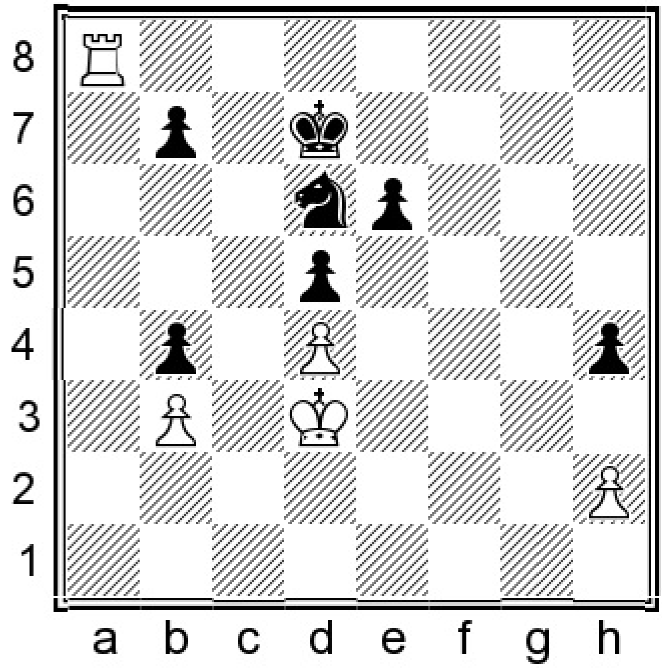
The white rook tries to reach the eighth rank.

40...h4

40...b4!? 41.♖a8 ♘c8 would have kept the rook out, but would have tied up both black pieces and allowed the white king to penetrate on the other wing. 42.♔e3 ♔c7 43.h4! gxh4 44.gxh4 ♘e7! (44...♘d6 45.♔f4 ♘f5 46.♔e5 ♘xh4 47.♔xe6, followed by ♔d5) was the most tenacious defence and would have forced White to calculate carefully: 45.♔f4! ♘c6 46.♔g5 (46.♖h8 ♘xd4 47.♖xh5 ♘xb3 48.♖g5 should also win) 46...♘xd4 47.♔xh5 ♘xb3 48.♖a4 ♘d4 49.♖xb4 ♘c6 50.♖b1 ♘e5 51.♔h6 d4 52.h5 d3 53.♔g7 and Black will not even be able to give up the knight for the white pawn.

41.gxh4 gxh4 42.♖a8 b4

42...♘f5 43.♖f8 ♔d6 44.♖f7 ♔c6 45.h3!+– (White threatens 46.♖f5, but in any case Black has to worsen his defensive position) 45...♘g3 46.♖f4! ♘f5 47.♖xf5 exf5 48.♔e3 ♔d6 49.♔f4 ♔e6 50.♔g5 b4 51.♔xh4.



43.♖a4?!

Quite surprising, since White will not be able to capture the pawn due to the typical trapping of the rook with ...b7-b5, but apparently it does not throw away the win.

43.♖f8! was clearly winning, but White must have been unable to see how to continue after 43...♘f5 (see the previous note): 44.♖f7+ ♔c6 45.h3!+–.

43...♔c7 44.♔e2

White must have noticed the trap 44.♖xb4?? b5!–+ in time.

44...♔c6 45.♖a8 ♘f5 46.♔d3 ♔d7 47.♖b8 ♔c7 48.♖f8!

And we have returned to the critical position of this ending.

48...♔d6 49.♖f7 b6

Black tries another way to keep all his pawns defended, but it has the same snag as all the others.

50.h3! ♘h6

If 50...♔c6 51.♖xf5!, as we have already seen: 51...exf5 52.♔e3 ♔d6 53.♔f4 ♔e6 54.♔g5+–.

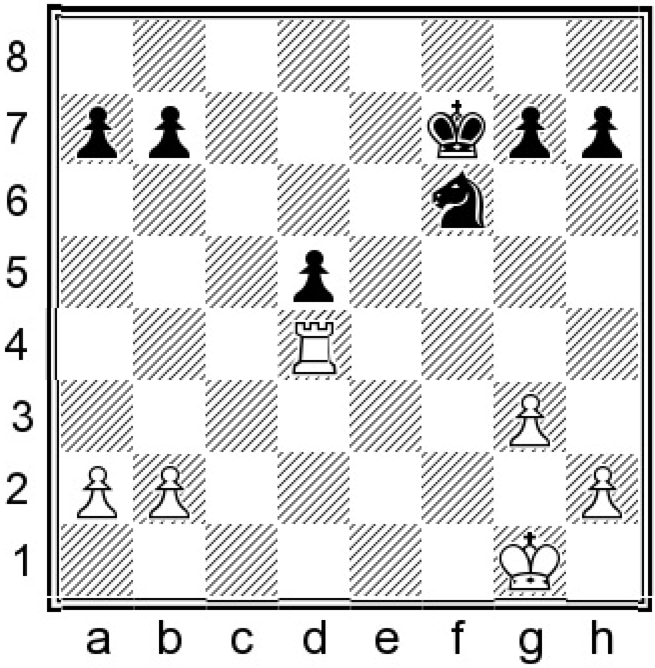
51.♖f4! ♘f5 52.♔e2 ♔e7 53.♔f3 ♔f7 54.♔g4 ♔g6 55.♖xf5! exf5+ 56.♔xh4

The outside passed pawn in the pawn ending is a winning advantage.

56...b5 57.♔g3 ♔g5 58.h4+ ♔h5 59.♔f4 ♔xh4 60.♔xf5 ♔g3 61.♔e5 ♔f3 62.♔xd5 ♔e3 63.♔c5 ♔d3 64.♔xb4 1-0

Finally, a simple example which shows us the ease with which the rook wins against the knight when there are pawns on both wings, and when neither of the two possible compensating conditions are present: 1) the possibility of a fortress, 2) enemy passed pawns.

Leon Maseev
Wolfgang Pietzsch
cr 1966



Black to move

28...♔e6 29.♖b4?!

To create weaknesses as soon as possible, but 29.♖a4! was the right way to exploit the power of the rook: 29...a6 30.♖b4 b5 31.a4 and a black pawn falls.

29...b6 30.♖a4 a5 31.b4

This way the black queenside pawn can be defended:

31...axb4 32.♖xb4 ♘d7 33.♔f2 ♔d6 34.♔e3 1-0

Black accepted that further resistance was futile anyway.

Chapter 12

Queen endings

The queen is the most powerful piece and thus queen endings have features that are more characteristic of the middlegame. The queen is so strong that from the centre of the board it controls twenty-seven squares, but its power increases when the enemy king is exposed, because by giving check it can reach virtually anywhere. We can verify this by setting up a board with just a queen and the opposing king and then imagining how to land on any square of the board after one check. I would recommend this as an amusing exercise; I have tried it for various pairs of central squares and in fact the queen can reach anywhere with just one check.

So in these final sections (including the ones on queen vs other pieces), we are often going to encounter plans involving looking for a mate, but in practice much more often we are going to come across mates which just appear, without there being any such plan. Just as sometimes it takes us time to adjust to the new scenario when we reach an endgame, it is also very common to relax in view of the apparent lack of danger once we have exchanged nearly all the pieces.

As a pale reflection of checkmate, perpetual check also appears frequently in these endings, and this becomes the main resource of the defending side, as we shall find in all of these patterns.

The other element which undergoes a big change in these endings is the passed pawn. Now, unless the king is unable to deal with the pawn, the queen is an abysmally poor blockader and the pawn can prove decisive, as we shall see in the very important **Pattern 92**.

Pattern 86 Mate (in queen endings)

Let us begin with three decisive situations: mate, stalemate and perpetual check.

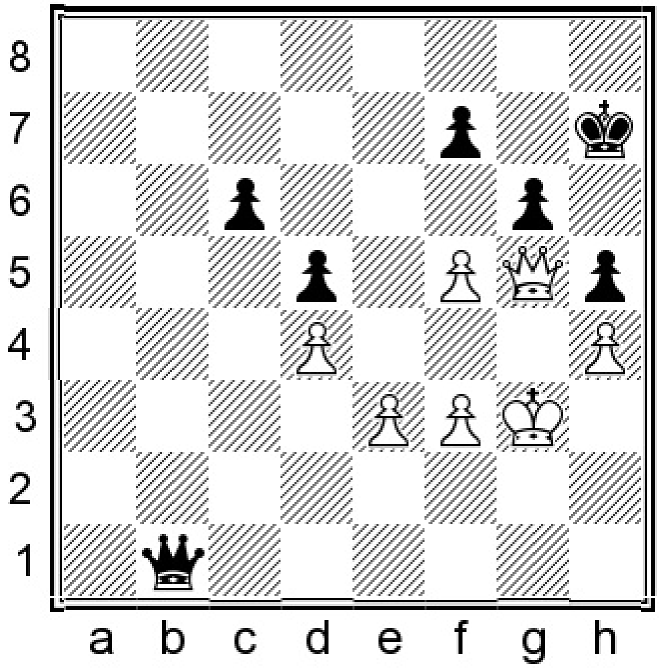
Checkmate ends the game, and a mating attack is the most common plan in the middlegame. In fact, the endgame is characterised by a reduction in the danger of mate and the carefree participation of the king.

However, in queen endings, the danger of mate remains considerably greater than in other types of ending.

On many occasions, the mate appears unexpectedly, arising from a continuation that one of the players has miscalculated, or even from a one-move blunder. But on many other occasions the mate appears as a strategic element, with at least one player playing with mate as the main objective. For this latter situation, the presence of enemy pawns in the vicinity of king is almost an essential, and at the same time this is a warning sign that should be respected.

We shall begin with the first type of case: an example of an unexpected mate due to a blunder.

Alexander Beliavsky 2649
Leif Johannessen 2427
Linares 2002 (2)



White to move

I can recall watching this game in the playing room. It was the only one left in play and the ever-ambitious Beliavsky had already spent many moves trying to squeeze a win from an unwinnable position. Then at one point he decided to advance his king...

69.♔f4??

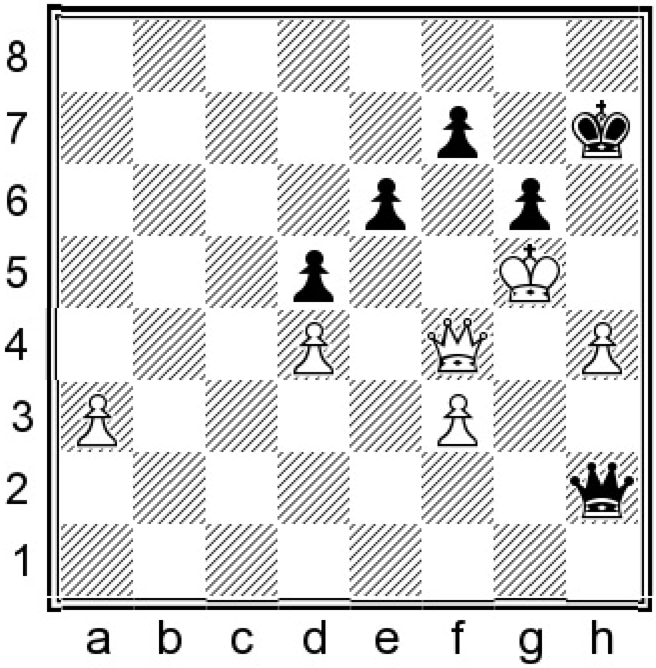
On this occasion the move definitely deserves two question marks.

69...♛b8#

There is nothing more to be said, except to confirm that these things happen and none of us is immune.

The following example is in essence the same, although much more intricate:

R Matohin
Gennady Kuzmin
USSR 1970



Black to move

White surely wanted to bring his king to f6 and e7 and later support his outside passed pawn, but he has incurred excessive risks.

1...f6+!

Black exploits for the first time the white king's limited mobility, caused by the need to defend the queen.

2.♔g4

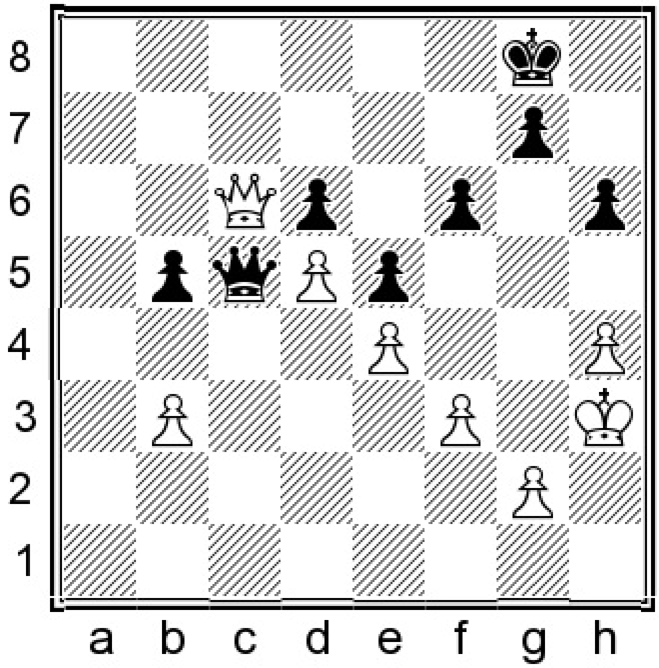
If 2.♕xf6 ♕g3#, the first mate.

2...♕g2+ 3.♕g3 f5+ 4.♔f4 e5+! 0-1

For the second time Black takes advantage of the white king's obligations. After 5.dxe5 ♕d2#, a second mating pattern appears.

Now we shall study a case in which the mate does not occur by accident, nor due to an excess of ambition on the part of one of the players, but as a consequence of strategic elements.

Hans-Joachim Hecht
Alain Villeneuve
France 1971



White to move

In the diagram position, White exploits the holes in Black’s kingside and uses the idea of mate as his main plan. For this to be successful he needs the collaboration of his king, and the help of the h-pawn is also useful.

1.h5

Strategically logical, fixing Black’s kingside pawns. But there was a much stronger way to execute the plan: 1.♔g4! (the white king makes immediate use of the *highway* along the light squares. In this variation White relies on the other important theme in queen endings: the creation of an advanced passed pawn) 1...♕g1 (1...h5+ 2.♔xh5 ♕e3 brings the queen closer to the defence, but as well as winning material White can press home the attack with 3.♔g6! ♕h6+ 4.♔f5 ♕xh4 5.♕e8+ ♔h7 6.♕g6+ ♔g8 7.♔e6+–) 2.♔f5 ♕xg2 3.♔e6 ♕xf3 4.♔xd6 ♕xe4 5.♔c7, and the d-pawn’s advance is unstoppable.

1.h5 ♔f8?!

A) 1...♕b4?! intends counterplay by capturing the pawn on b3, but White can insist on launching his king into the attack with 2.♔g4! ♕xb3 3.♔f5 ♕a2 (3...b4 4.♔g6 and mate is already unstoppable) 4.♕xd6 ♕xg2 (for a moment Black also threatens mate) 5.♔e6 ♕xf3 6.♔e7 ♕xe4 7.♕d8+ ♔h7 8.♔f7, once again forcing mate;

B) 1...♕g1! is the most tenacious variation by far and is based on the defender’s main source of counterplay in queen endings – the search for perpetual check: 2.♕xd6 ♕h1+ 3.♔g3 ♕xh5 4.♕b8+ ♔f7 5.♕xb5 ♕g5+ 6.♔f2 ♕d2+ 7.♕e2 ♕d4+ 8.♕e3 ♕b2+ 9.♔g3 h5 10.♔h2, and now that his king is safe White will be able to exploit his two passed pawns, yet after 10...h4! Black can continue to resist.

2.♕a8+

White opts to improve his queen before advancing the king, but 2.♔g4 was equally strong, forcing Black to choose between a losing pawn ending or a devastating mating attack: 2...♔g8 (2...♕xc6 3.dxc6 ♔e7 4.♔f5 ♔d8 5.♔e6 ♔c7 6.♔d5 and White wins, thanks to his reserve tempi) 3.♔f5 ♕f2 4.♔e6 (the king joins in the attack and mate is unavoidable) 4...♕xg2 5.♕e8+ ♔h7 6.♔f7 ♕xf3 7.♕g8#.

2...♔e7

2...♔f7 3.♕b7+ ♔g8 4.♔g4! ♕c2 5.♔f5+–.

3.♕b7+ ♔f8 4.♔g4 ♔g8

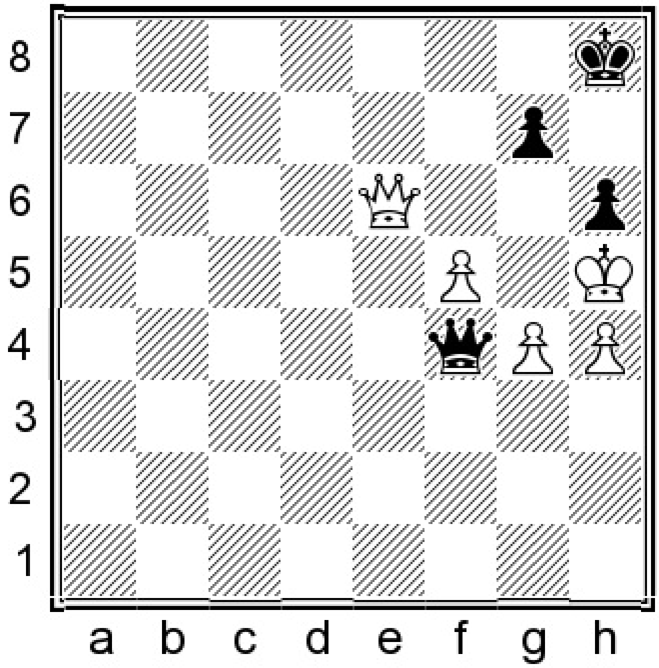
4...♕f2 5.♕c8+ ♔f7 6.♕e6+ ♔f8 7.♕xd6+ and the d-pawn wins.

5.♔f5 ♔h7 6.♔e6 ♕f2 7.♔f7 ♕h4 8.♔f8! 1-0

It will be mate in at most two moves.

Now we shall see a structure on the edge of the board which often occurs and gives rise to several tactical themes.

Leonid Shcherbakov
Vladimir Arlazarov
USSR 1972



White to move

This position has occurred in at least four games, with three different continuations at this point. The black king is stuck in the corner and it is logical that White’s plan should be to try to force mate, although the white king must also take care...

1.f6!

A correct move, as long as White has calculated the continuation precisely. In Mackenzie-Sergeant, Edinburgh 1920, White won easily with an unsound but very instructive variation: 1.♔g6? ♕xg4+ 2.♔f7 ♕h5+? (2...♔h7!=) 3.♔f8 and mate is unavoidable.

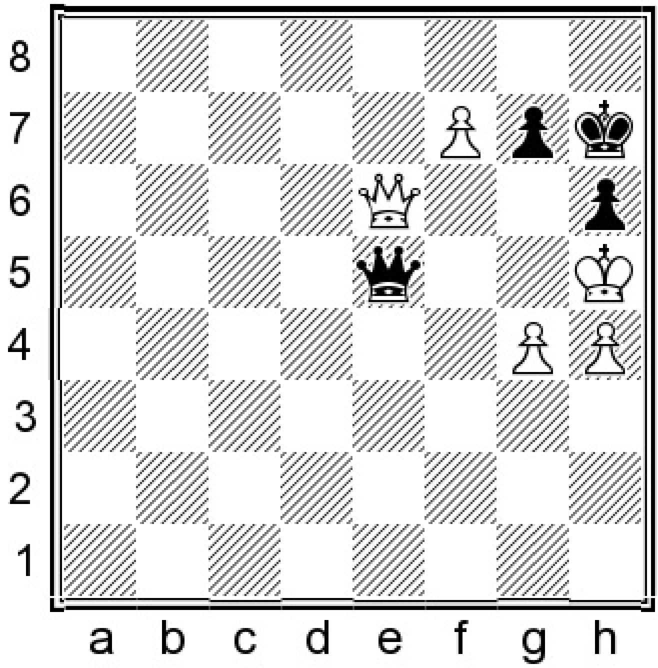
1.g5! is a more natural continuation to try for a mate: 1...hxg5 2.♔g6 (2.hxg5 allows the draw with 2...♕h2+ 3.♔g6 ♕h7+ 4.♔f7 g6+!) 2...♕b8 3.hxg5 (preparing 4.♕e4 or 4.♕c6, to threaten mate on h1) 3...♕d8 (3...♕a8?! prevents checks on the b1-h7 diagonal but White has 4.f6! and the mate cannot be stopped) 4.♕c6 ♕g8 and 1-0 Heslenfeld-Morrison, Bad Wörishofen 1991.

1.f6! ♔h7

1...gxf6 2.♔g6 with unavoidable and immediate mate.

2.fxg7??

White overlooks the possibility of stalemate, which is precisely the theme of our next section. However, he had two ways to win, the first in brilliant fashion: 2.f7! ♕e5+!



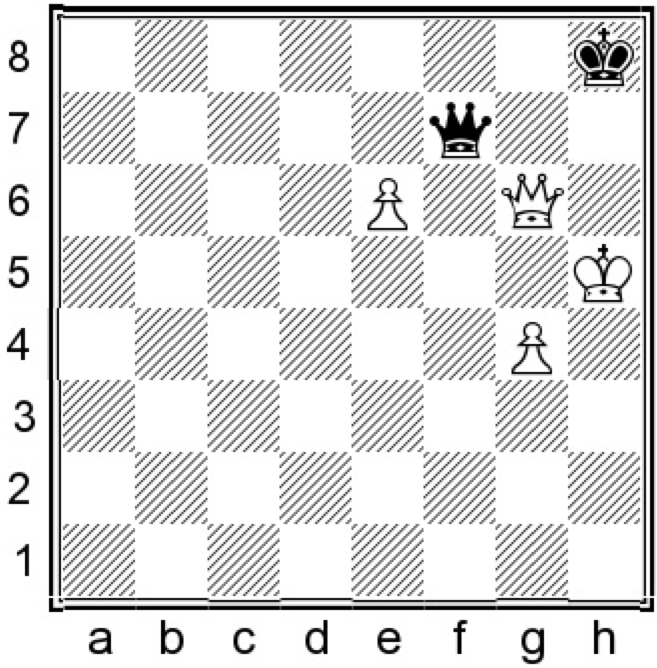
analysis diagram

3.g5! (it is curious and necessary to point out that after 3.♕xe5?? g6 the white king is the one getting mated) 3...♕xe6 4.f8=♘+!+−.

The other way to win is a really instructive pawn ending: 2.♕f5+! ♕xf5+ 3.gxf5 gxf6 4.♔g4 h5+ 5.♔f4 ♔g7 6.♔e4 ♔f7 7.♔d5 ♔e7 8.♔c6 1-0, Matsuura-Carneiro, Rio de Janeiro 2017.

2...♕f7+! ½-½

Pattern 87 Stalemate (in queen endings)



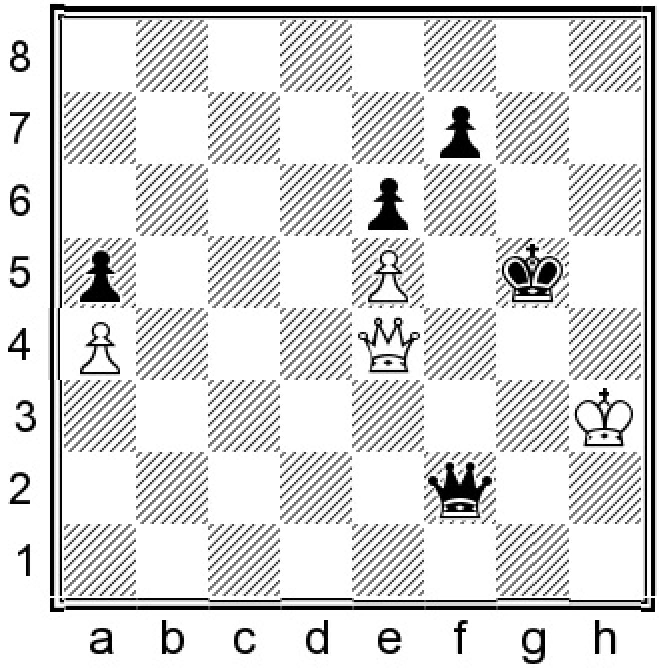
Just as with checkmate, stalemate ends the game, but unlike checkmate this is always a purely tactical matter. That is why in this section there will be numerous very short examples. Stalemate is a factor present in all endings, but in queen endings it has the 'bad habit' of occurring often. Sometimes it appears in ways that are typical and for that reason we devote a separate section to it.

First of all, we should observe that it is reckless for the stronger side to allow a position where the defender's king is left with no moves and only has one major piece left (which is very easy to sacrifice) and we should treat this circumstance as a tactical warning sign.

By the way, who is to move in the diagram position?

Our first example is a case of the *crazy queen*.

Oscar de la Riva 2495
Gabor Kallai 2470
France tt 1998



White to move

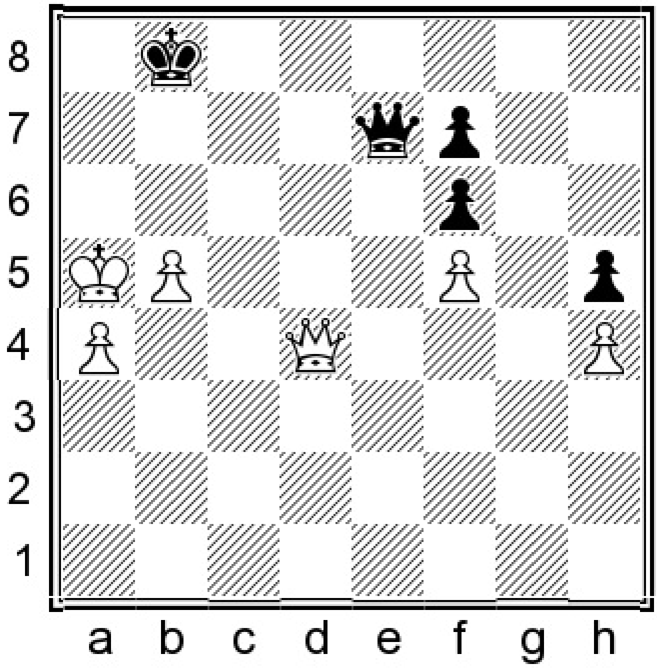
White is a pawn down, but his king has no moves and suffering does not form part of his plans:

70.♕g4+ ♔h6 71.♕h5+!

And Black must choose between the two typical drawing situations in queen endings: stalemate, our present topic of study, or perpetual check, which we shall see in the next section.

71...♔xh5 ½-½

Mikhail Chigorin
Carl Schlechter
Ostend 1905 (22)



Black to move

Some stalemates are typical, which is one of the reasons why it is useful to classify, study and recognise them. In the case of queen endings, the most famous example is the retreat into the corner in reply to a check which appears decisive; this has caught out quite a few famous players.

44...♛c7+!

A trap which can be laid with ever fewer hopes each time, but was a real novelty in those bygone days.

45.♕b6+??

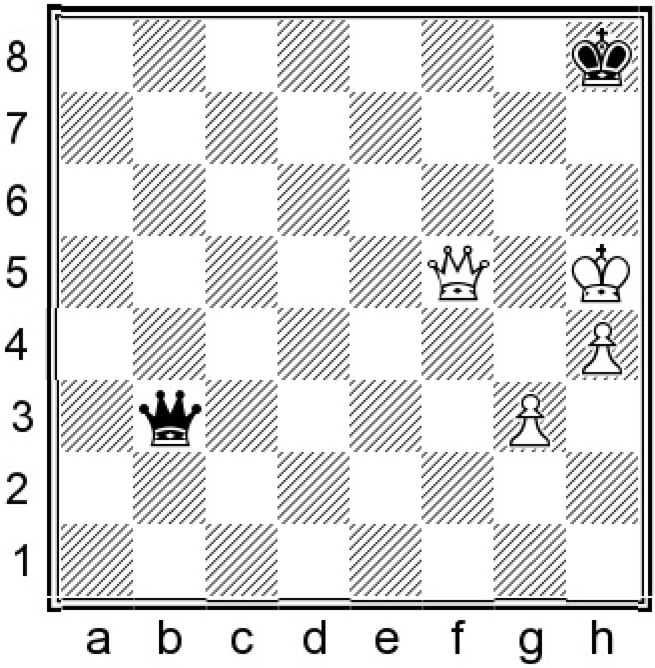
And this time Chigorin is the one caught out. This seems decisive, but it is the only legal move that does not win.

45...♚a8! ½-½

This must have come as a shock to Chigorin, who had a long history of blunders. He had no choice but to agree a draw here. For example 46.♔a6 ♛c8+ 47.♔a5 ♛c7!.

We shall look at a couple of further examples on the same theme.

Roger Fischer 2162
Matthias Kierzek 2150
Germany tt 2002 (5)



White to move

White had worked hard to bring his queen to the inadvisable square f5 and now he decided to leave it there and advance a pawn:

63.g4?

Many other moves win.

63...♕f7+! 64.♕g6

Perhaps White was relying on this.

64...♕d5+ 65.♔h6

A) 65.♕f5 ♕f7+!;

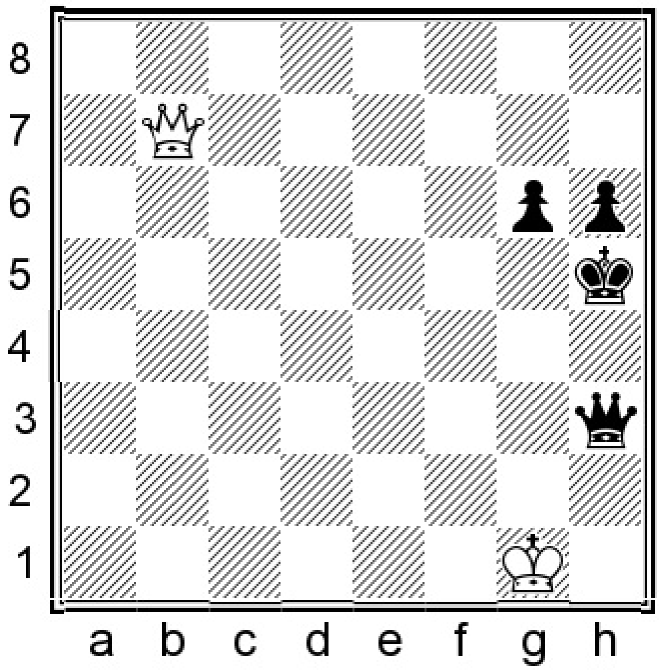
B) 65.g5 leaves Black with a curious choice between 65...♕f3+, followed by ...♕f8, with perpetual check, or 65...♕f7, leaving the choice between perpetual check and stalemate to his opponent.

65...♕g5+ ½-½

Thanks to computer analysis, we now know that the ending of two connected passed pawns on the edge is a draw with queens on the board. Previously this would have seemed like a joke. But in any case a lengthy defence is very unpleasant and we always feel grateful to find a shortcut on the long path to a draw.

Jonathan Carvajal Gordona

Carlos Alfaro Murillo
San José ch-CRI 2001 (8)



Black to move

59...g5 60.♕f7+ ♔h4 61.♕f2+!

Many other moves also draw, but this is the shortcut we were seeking.

61...♕g3+ 62.♔h1

This no longer surprises us, but in this example there are a few further amusing details:

62...h5

62...♔h3 63.♕f1+ ♔g4 64.♕f5+=.

63.♕d4+ ♔h3 64.♕g4+! ½-½

Amusing, isn't it? As long as it happens to someone else.

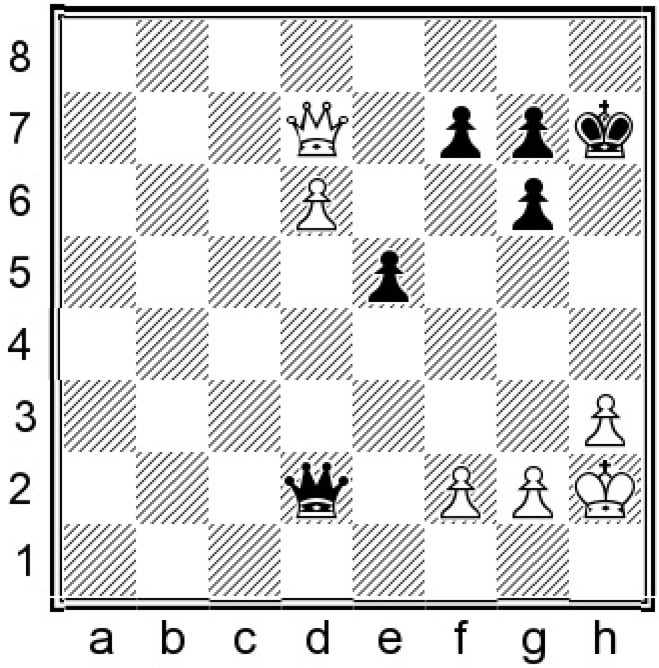
Pattern 88 Perpetual check

Perpetual check also ends the game, although sometimes it takes a little longer than mate or stalemate.

As we have already said and will repeat, perpetual check is the defender's main resource in a queen ending. It might consist of a few checks to a king which is then forced to repeat moves, or a chase across the whole board. Some 'perpetuals' are typical, and it is very useful to know them. Others are less common, but in these cases too the relevant circumstances often recur.

One of the most typical perpetuals consists of checks on c1 and f4 (c8 and f5 against the black king). Examples are not hard to find:

Viktor Kortchnoi 2615
Anthony Miles 2600
Horgen 1994 (10)



White to move

The white pawn is very close to promotion. The queen alone cannot stop it and the black king is unable to help. In such cases, the defender’s only hope is to set up perpetual check. Here Black is threatening a typical perpetual (on f4 and c1) but the position of the white king is relatively solid, which means that Black will need to use his pawns to weaken it. In addition, White can now choose which square to move his queen to.

46.♕c7?

A rather strange decision. The nearer the queen is to the centre, the more cover it provides against checks to its king. The move in the game shows impatience to ensure the promotion of the pawn by supporting the two squares ahead of it.

A) 46.♕e7? was not good either, because it allows the typical perpetual 46...♕f4+ 47.♔g1 ♕c1+ with a draw;

B) 46.♕c6! was the correct move, because it prevents the perpetual in an equally typical manner: 46...♕f4+ (46...♕xf2 47.d7 ♕f4+ 48.♔g1 ♕d4+ 49.♔h1 ♕d1+ 50.♔h2 and the checks are at an end) 47.♔h1! e4 48.d7 ♕d2 49.♕c7+–.

46.♕c7? ♛f4+! 47.♔g1 e4

Now the d-pawn is pinned.

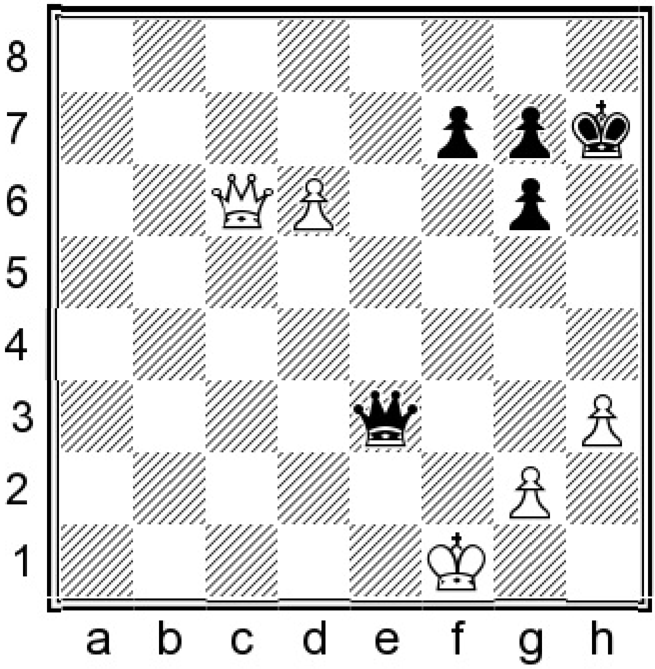
48.♕c6

White has unpinned the pawn and placed the queen on the square which was winning two moves ago, but he will pay dearly for the loss of time. Instead, 48.♕c5 controls e3, but then 48...♛d2 49.♕e5 f6 draws.

48...e3!

Correct, further opening the white king's position. Here is another variation which, although slower, also works and is instructive: 48...♛e5 49.d7 ♛a1+ 50.♔h2 ♛e5+ 51.g3 ♛d4 52.♔g2 ♛d1 53.♕c7 ♛f3+ 54.♔g1 ♛d1+ 55.♔h2 ♛d2!=. In this line the e4-pawn also plays an important role.

49.fxe3 ♛xe3+ 50.♔f1



50...♛d2! 51.d7

Now the white king is very exposed, but the white pawn is just one step away from promotion.

51...f5

The f-pawn takes part in the construction of the perpetual check mechanism.

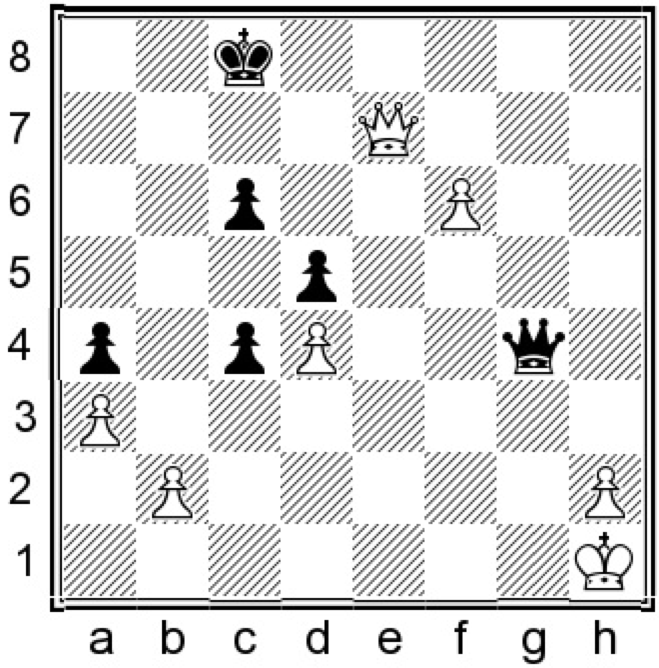
52.♕c7 ♛d1+ 53.♔f2 ♛d2+ 54.♔g1 f4!

The decisive mechanism is in place. Black will give another typical perpetual with checks on e1 and g3.

55.d8=♕ ♕e1+ 56.♔h2 ♕g3+ 57.♔g1 ♕e1+ ½-½

We shall now see another scenario with a very advanced passed pawn:

Jeroen Piket 2570
Jeroen Bosch 2440
Amsterdam ch-NED 1996 (5)



Black to move

In this position, White has placed his queen in a rather awkward position for preventing checks by the opposing queen, but he is relying on being able to escape with his king via f4-e5.

48...♕f3+

Black begins his ‘eternal’ series of checks.

49.♔g1 ♕g4+ 50.♔f2 ♕f4+

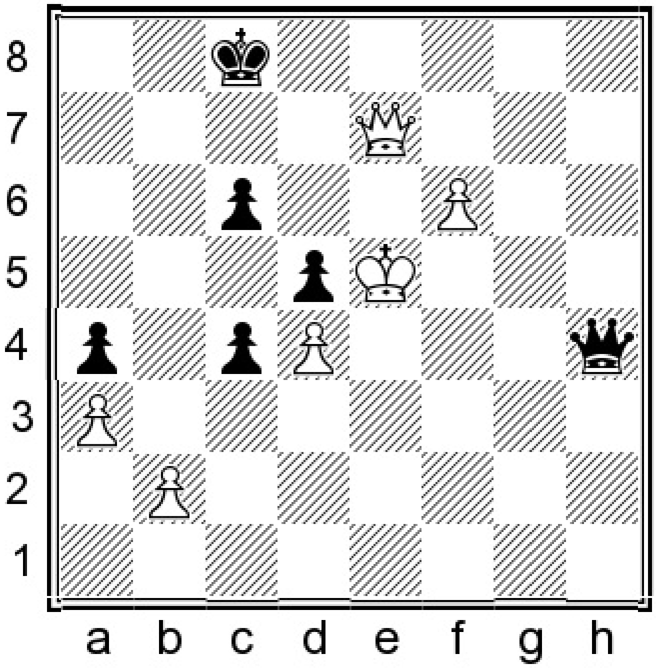
There is also a technical element in evading perpetual check. A first step is to move the king to squares where the checks can only be made from further away; the second step would be to reach squares where no checks are possible. At this moment White takes the first step with his king and forces the opponent to find precise moves.

51.♔e2

Apparently heading for the queenside, but keeping an eye on the possible escape route e5-e6-d6.

51...♕g4+!

It frequently happens that the capture of some pawn or other distracts the queen from delivering the correct checks. For example, 51...♕xh2+? 52.♔f3! ♕h3+ 53.♔f4 ♕h4+ 54.♔e5



analysis diagram

and the king hides away. An escape route, with a triangle of squares available, such as the one shown in the diagram, is usually quite adequate to allow the king to escape, e.g. 54...♕g3+ 55.♔e6 ♕g4+ 56.♔d6, and the checks come to an end.

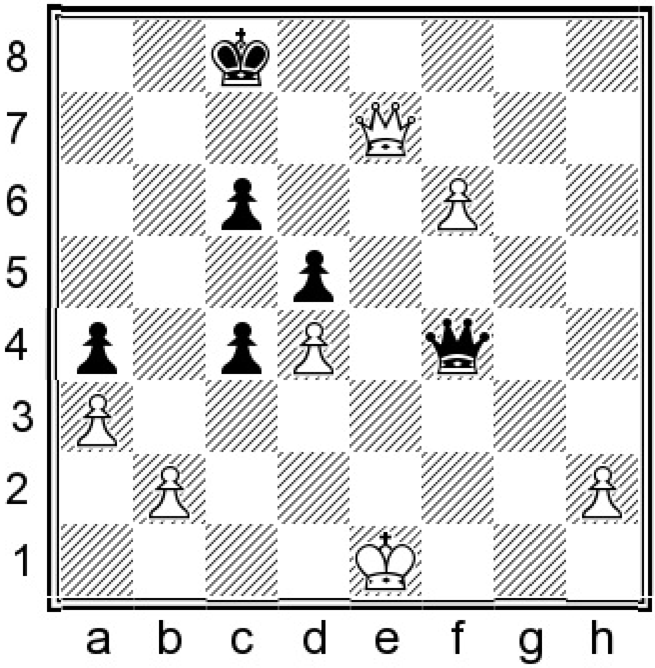
52.♔e3 ♕g5+!

Black must prevent the king from approaching its escape routes.

52...♕h3+? 53.♔f4! ♕xh2+ 54.♔f5 leads to the previous variation.

53.♔f3 ♕f5+ 54.♔g3 ♕g5+! 55.♔h3 ♕h5+ 56.♔g3 ♕g5+ 57.♔h3 ♕h5+ 58.♔g2 ♕g4+ 59.♔f2 ♕f4+ 60.♔e1

A new tactical twist.



60...♕h4+!!

Black remains vigilant. 60...♕c1+? 61.♔e2 ♕c2+ 62.♔e3 ♕c1+ – as soon as the king turns back and is situated ahead of of the attacking queen, it can escape by the same route as before: 63.♔f3 ♕f1+ 64.♔g4 ♕g2+ 65.♔f5, arriving at the position of the last analysis diagram.

61.♔e2

61.♔d2 ♕xd4+ 62.♔c1 leads to the game continuation.

61...♕g4+ 62.♔d2

Finally White commits himself to taking the queenside route.

62...♕xd4+ 63.♔c1 ♕f4+ 64.♔c2 ♕f5+ 65.♔c3 ♕d3+ 66.♔b4

And after seventeen consecutive checks, Black must interrupt the series and prepare for the resumption with a strong move:

66...♕d4!

66...c3 was also correct, e.g. 67.♔c5 (67.bxc3?? ♕b5#) 67...cxb2 and the arrival of the black pawn on the seventh rank forces White to give perpetual check himself: 68.♕e8+ ♔c7 69.♕e7+=.

67.♔a5

The desirable 67.f7? was not possible, due to 67...♕xb2+, followed by mate or the capture of the white queen.

67...♕xb2

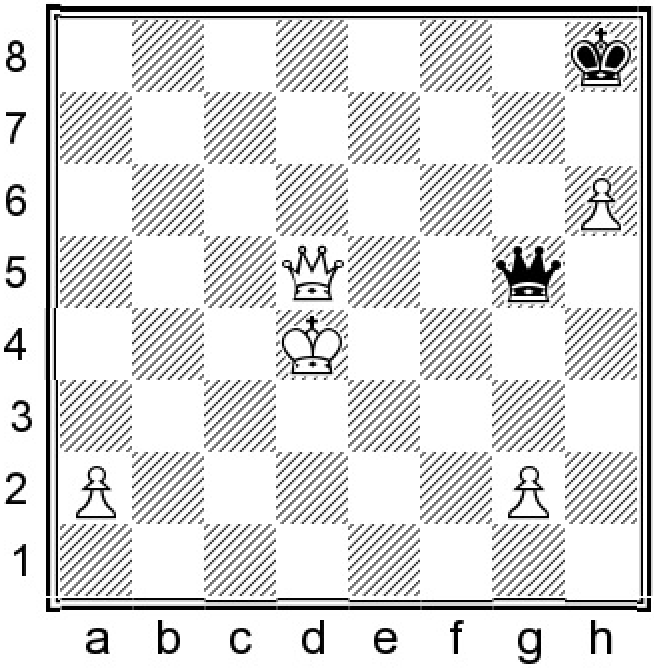
This threatens mate and now it is White who feels obliged to give perpetual check:

68.♕f8+ ♔c7 69.♕e7+ ♔c8 70.♕f8+ ½-½

In addition to the typical perpetual check positions, there is a mechanism which is worth knowing. The side with the advantage finds it impossible to hide his king from checks because on each move it is forced to defend the queen. This is usually called the *wheel of checks*.

The set-up that we see in the diagram on the right, with the queen in the centre, protected by the king, is the typical scenario.

The wheel



Black to move

The black queen will give check on one of the eight squares a2, a5, a8, d2, d8, g2, g5, g8, always maintaining an X-ray attack on the white queen:

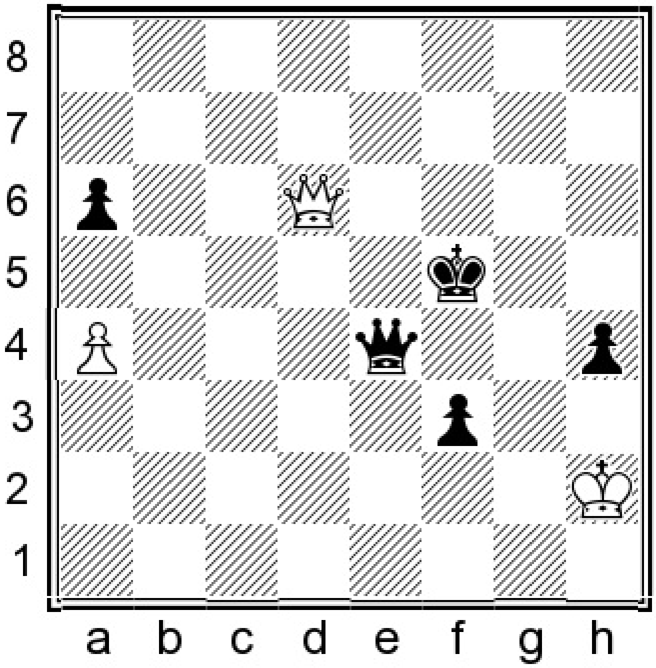
61...♕d2+ 62.♔c5 ♕a5+

Other checks, such as 62...♕c3+?, disrupt the mechanism and the checks would soon end, e.g. 63.♔d6 ♕f6+ 64.♔c7 ♕e7+ 65.♔c8+–.

63.♔d6 ♕d8+ 64.♔e5 ♕g5+ 65.♔e6 ♕g8+ 66.♔d6 ♕d8+ 67.♔c6 ♕a8+ 68.♔c5 ♕a5+ 69.♔c4 ♕xa2+ 70.♔d4 ♕d2+ 71.♔e4 ♕xg2+ 72.♔e5 ♕g5+ 73.♔e6 ♕g8+=

Let’s see how this works in practice.

Tatiana Pudkova 2130
Angela Borsuk 2165
Podolsk 1990 (7)



White to move

Here White is in time trouble, but perhaps she can keep checking for ever, or at least for a long time.

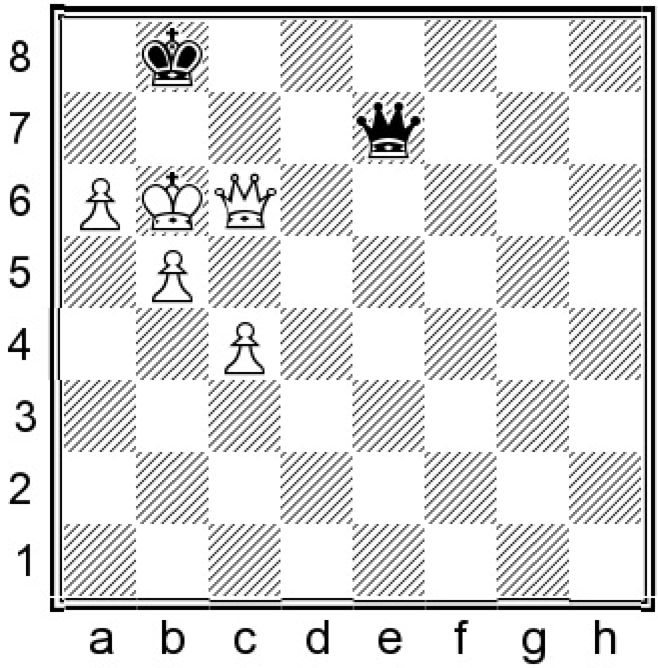
67.♕f8+ ♔e5?

Black immediately enters the mechanism of the wheel, which also occurs after 67...♔e6. With an effort it was possible to end the checks: 67...♔g5 68.♕g8+ (68.♕g7+ ♕g6 69.♕e7+ ♕f6 70.♕c5+ ♕f5 71.♕e7+ ♔g4 72.♕g7+ ♔f4 73.♕c7+ ♕e5!, and the king will move away with check) 68...♔f4 69.♕f7+ ♔e3 70.♕b3+ ♔e2 71.♕b2+ ♔f1 and the checks come to an end. White does not miss the opportunity:

68.♕e7+! ♔d5 69.♕b7+ ♔d4 70.♕b4+ ♔d3 71.♕b1+ ♔e3 72.♕e1+ ♔d4 73.♕b4+ ½-½

There can be few perpetual check positions as surprising as the next one, in which despite White’s three connected passed pawns, and even with the move, perpetual check cannot be prevented.

Smajovic
Bavic
Yugoslavia 1949



White to move

Well, in fact White cannot prevent the perpetual precisely because it is his move! It is an amazing reciprocal zugzwang position.

1.♕c5

1.♔a5 ♕a3+ and White must repeat the position;

if 1.♕d5?? ♕c7#;

or 1.c5?? ♕d8+, followed by mate.

1.♕c5 ♕d8+ 2.♔c6 ♕c8+ 3.♔d6 ♕f8+ 4.♔d5 ♕f5+ 5.♔d4 ♕f2+

With a draw, using the mechanism of *the wheel.*

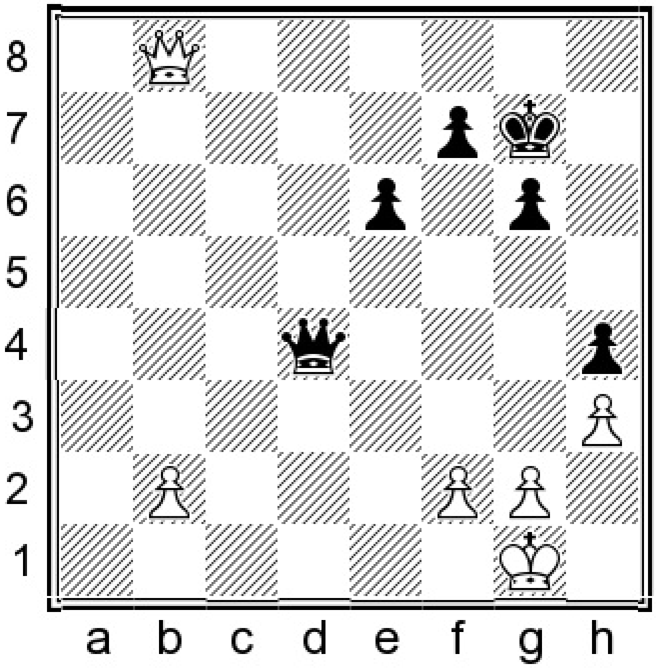
Pattern 89 Perpetual check as a strategy

In the previous section we covered several situations involving perpetual check and its tactical characteristics.

We are going to devote another section to the theme and this is justified because perpetual check is the main plan in queen endings. We are now going to study positions in which a player is seeking perpetual check as a medium-term objective and the perspective is therefore a strategic one, since to give perpetual check some preparatory work is necessary.

Naturally the continuations are longer and we shall only analyse two positions, which should be sufficient to illustrate the idea. But in the following sections we are always going to encounter one player who has the plan of perpetual check.

Anthony Miles 2565
Ulf Andersson 2545
Amsterdam 1978 (5)



White to move

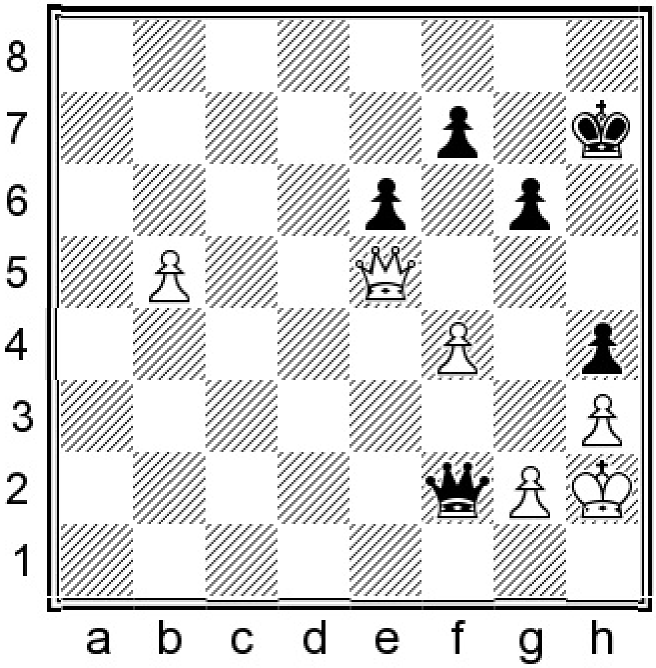
In this first position, we have a common scenario: a passed pawn which will advance quite quickly up the ranks towards the queening square, and a kingside composed of three pawns, whose function will be to prevent perpetual check. Studying it more deeply, we can see that, because of the black pawn on h4, the white queen will be forced to attend to the thematic perpetual check on the squares f4 and c1. For his part, Black will have to advance at least one other of his pawns, in order to threaten perpetual more seriously.

48.b4

This seems a curious way to advance the pawn, which can reach as far as the seventh rank with the queen in front of it, but it is very logical if we take into account that from the b8-square the queen prevents checks to its king.

48...e5

Blocking the h2-b8 diagonal proves to be sufficient and will allow us to see a very interesting continuation. But a more logical plan was 48...♕d1+!? 49.♔h2 ♕d4 (immediately attacking the f2-square) 50.f4 (50.b5 allows the black queen to capture the f2-pawn and then advance his e-pawn to plug the diagonal, e.g. 50...♕xf2 51.b6 ♕d4 52.b7 e5! 53.♕c7 ♕f4+ 54.♔g1 ♕e3+ 55.♔f1 ♕f4+ 56.♔e2 ♕e4+ 57.♔d2 ♕b4+ 58.♔c2 ♕a4+ 59.♔c3 ♕a3+ and the king cannot advance) 50...♕f2 51.♕e5+ ♔h7 52.b5



analysis diagram

and we reach a dead end. Perpetual check is prevented but the passed pawn has also been stopped and there seems no way to make progress: 52...♔g8!=.

49.b5 ♕c5

Already threatening the thematic perpetual check on c1 and f4.

50.♔h2 f6?!

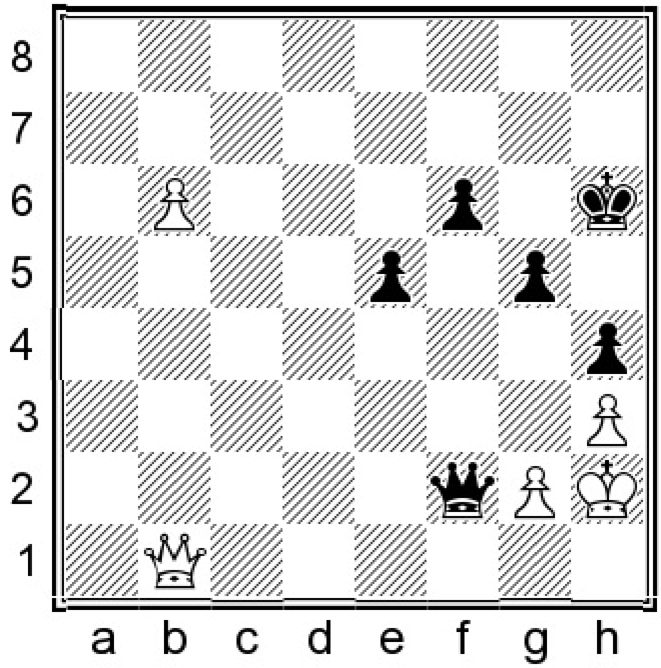
This manoeuvre to threaten perpetual check is rather slow. Black is playing himself into trouble. 50...♕d4! was the natural move to be able to check right away on f4: 51.♕c7 (51.b6?! allows an immediate draw with 51...♕f4+ 52.♔g1 ♕c1+=) 51...♔g8! (to be able to play ...♕xf2 without the capture on e5 being check) 52.f3 (52.b6 ♕xf2!=) 52...♕f4+ 53.♔h1 ♕e3 (now Black is threatening the equally thematic perpetual check on e1 and g3) 54.♕d8+ ♔g7 55.♕xh4 ♕b3= and the b5-pawn falls.

51.b6 ♕xf2

With the black queen now very close to White's king, it seems that Black has everything well under control.

52.♕c7+ ♔h8?

52...♔h6! was the correct move, but it is uncomfortable to allow the white queen to reach the first rank with tempo and then push his passed pawn: 53.♕c1+ g5! (this move is necessary; although the pawn is pinned now, it will be unpinned if the white queen moves behind the passed pawn) 54.♕b1 (54.b7?! ♕b6 55.♕c8 ♕b3 and White can choose between giving perpetual check himself or receiving it)



analysis diagram

and we arrive at another critical point; the white queen 'pushes' the pawn, but Black has a breathing space of a couple of moves to increase his threats: 54...g4! 55.hxg4 (55.b7 gxh3=) 55...♕g3+ 56.♔h1 h3 57.♕b2 ♔g7! (57...hxg2+ also leads to a perpetual with 58.♕xg2 ♕e1+ 59.♕g1 ♕e4+) 58.b7 hxg2+ 59.♕xg2 ♕h4+ and once again we reach a typical perpetual check.

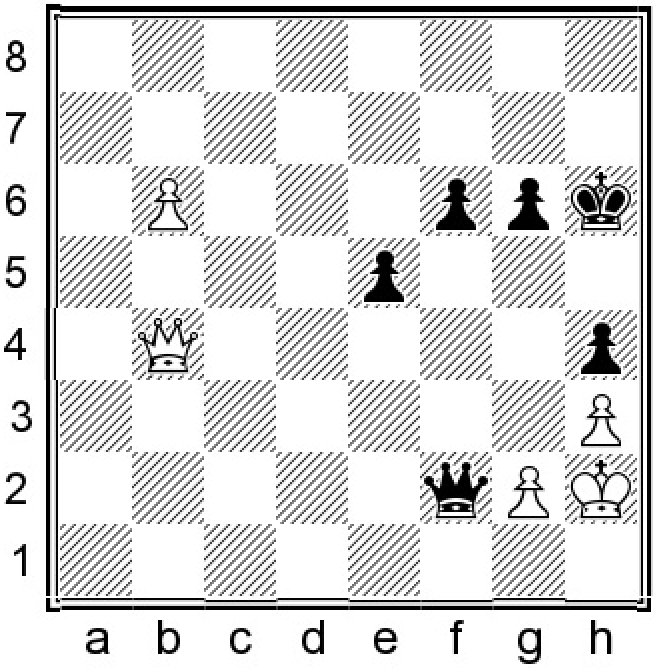
53.♕c8+?

White settles for the draw, because he literally 'did not see' the key square b4.

53...♔g7 54.♕c7+ ♔h8? 55.♕d8+! ♔g7 56.♕c7+?

Accepting the draw.

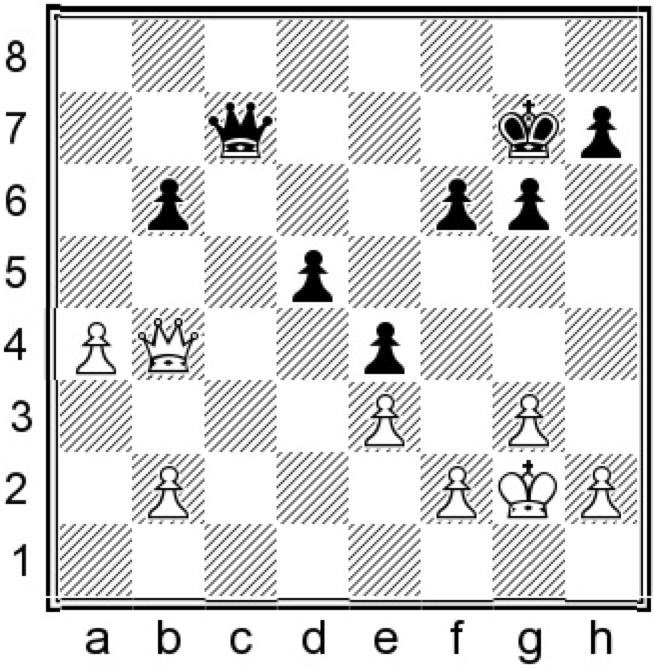
The winning manoeuvre is very logical and consists of giving a few checks and then placing the queen behind the pawn, specifically on b4: 56.♕e7+! ♔h6 57.♕b4!.



analysis diagram

Presenting us with another interesting diagram. White’s queen covers one of the squares needed for the perpetual and he is threatening to queen in two moves. Black has not been given the free gift of the move ...g6-g5 and now needs to hurry: 57...e4! 58.b7 ♕f4+ 59.♔g1 ♕c1+ 60.♔f2 ♕c2+ 61.♔e3 ♕d3+ 62.♔f4 ♕g3+ (sometimes in these endings there is a thin line between mate and the king escaping. After 62...g5+ the white king escapes, without a scratch: 63.♔f5 e3+ 64.♔e6!+–) 63.♔xe4 ♕b8 and we have moved onto another phase, with the black queen in its most humiliating position. With a modicum of care in the handling of his king, White should win, e.g. 64.♕e7 ♔g5 65.♔d5 ♔h6 66.♔c6 ♔g5 67.♕d6+–.

Evgeny Bareev 2555
Alexander Chernin 2560
Pula 1988 (variation)



Black to move

Faced with the unstoppable progress of White’s plan on the queenside, Black cannot rely on passive defence and, since the white king’s defences are solid, he needs to begin working to erode them. For this purpose the correct move is:

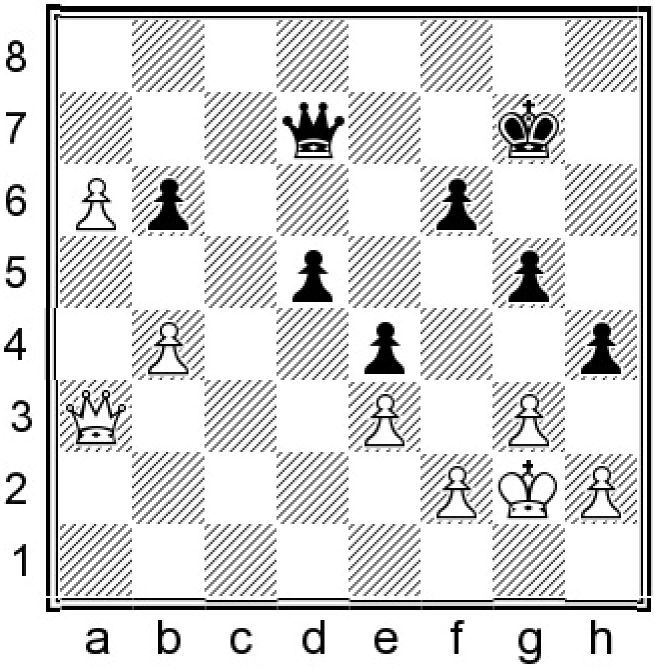
36...g5!

In contrast, the game saw 36...♔f7? when White made the win look astonishingly easy: 37.♕b5 ♔e6 38.b4 ♔d6 39.♕e8 f5 40.h4 ♕c4 41.♕b8+ ♔c6 42.b5+ ♔d7 43.♕xb6 ♕xa4 44.♕c6+ ♔e7 45.♕xd5 ♕b4 46.♕e5+ ♔f7 47.♕c7+ ♔f6 1-0.

Instead, 36...♕c2!? brings the queen closer, to try to threaten perpetual check, but after 37.♕xb6! ♕d1 38.h3 ♕f3+ 39.♔g1 ♕d1+ 40.♔h2 ♕e2 White can arrange the defence of f2 with his queen by force, e.g. 41.♕c7+ ♔f8 (41...♔h6 42.♕f4+!) 42.♕d6+ ♔g7 43.♕e7+ ♔g8 44.♕xf6, defending the f2-pawn.

36...g5! 37.♕d4

Another way to arrange the advance of the pawns was with 37.♕a3, placing the queen behind the future passed a-pawn, but here too Black can find a way to deliver perpetual check: 37...♕d7! 38.b4 h5 39.a5 (since this does not work, White might try 39.h3 d4 40.exd4 ♕xd4 41.a5 ♕d5 42.♔h2 ♕f5 43.♔g1 bxa5 44.bxa5 e3 45.fxe3 ♕b1+, with another perpetual check) 39...h4 40.a6



analysis diagram

40...♕g4 (threatening mate) 41.♕a1 h3+ 42.♔g1 ♕f3 43.♕f1 d4! 44.exd4 e3 45.fxe3 ♕xe3+ 46.♕f2 ♕c1+ 47.♕f1 ♕e3+, with perpetual check.

37...♕c6! 38.b4

38.♕d1!? ♕d6 keeps the white majority blockaded and plans to continue with ...♔g6 and ...h7-h5.

38...♕xa4 39.♕xb6 ♕d1

The black queen sets up its first threat of perpetual check with ...♕f3-h5-d1 and White is now in no position to prevent it.

40.h3

A) 40.♕c5 ♕f3+ 41.♔g1 ♕d1+=;

B) 40.♕d4? is not possible, due to 40...♕xd4 41.exd4 ♔f7–+.

40...♕f3+ 41.♔g1 ♕d1+ 42.♔h2 ♕f1 43.♕a7+ ♔g6 44.♕a2

White’s queen has arrived in time to defend f2 and he prepares to push his passed pawn all the way to promotion. Once again Black must hurry to destroy the white king’s pawn cover:

44...h5! 45.♕b2 g4

Threatening 46...gxh3 and 47...♕g2 mate.

45...h4 should also have been sufficient, e.g. 46.gxh4 gxh4 47.b5 d4! 48.exd4 e3 49.fxe3 ♕d3 50.b6 ♕xe3=.

46.hxg4 hxg4 47.b5 d4!

47...f5? is too slow, thanks to a defensive tour by the white queen: 48.b6 f4 49.exf4 e3 and now White begins a series of checks which results in the capture of the pawn: 50.♕c2+! ♔h6 51.♕c6+ ♔h7 52.♕d7+ ♔h6 53.♕e6+ ♔g7 54.♕xe3+–.

48.exd4 e3 49.fxe3 ♕h3+

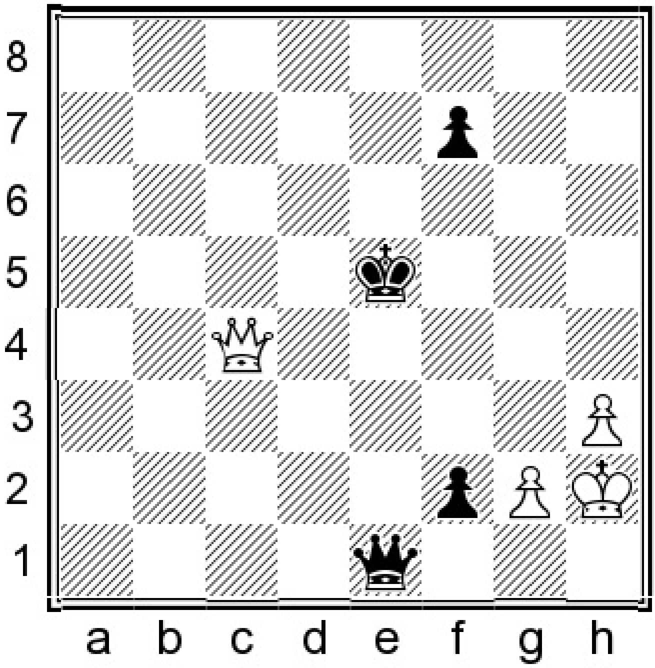
With a draw. Finally the white king has been exposed and cannot hide from the black queen's checks.

Pattern 90 The shield

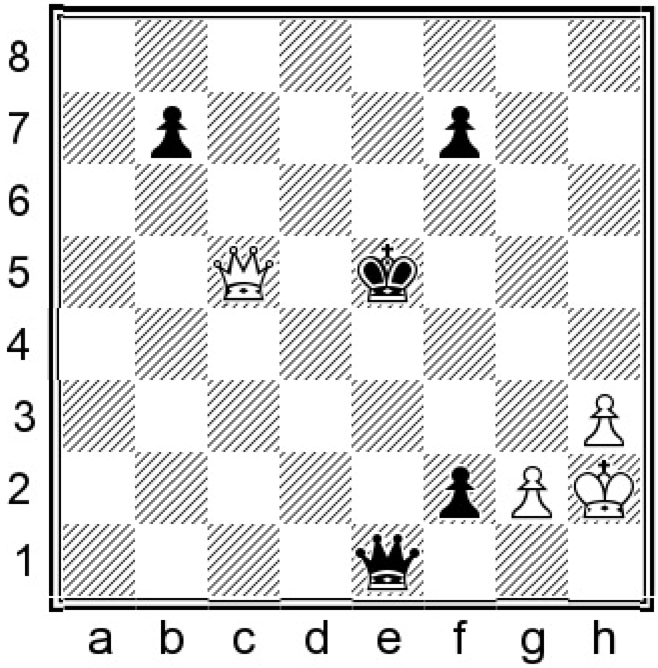
We shall continue to explore the idea that perpetual check is the main defensive resource in queen endings.

In this section we shall see an interesting pattern for the side trying to prevent perpetual check. In some positions, the king being checked ends up finding shelter behind the opponent's pawns, which the queen giving check cannot capture, precisely because they are its own pawns. We shall call this situation *the shield*. We begin with a series of three diagrams which will allow us to visualise this idea. They are all based on the position in the game Unzicker-Taimanov, which we analyse below.

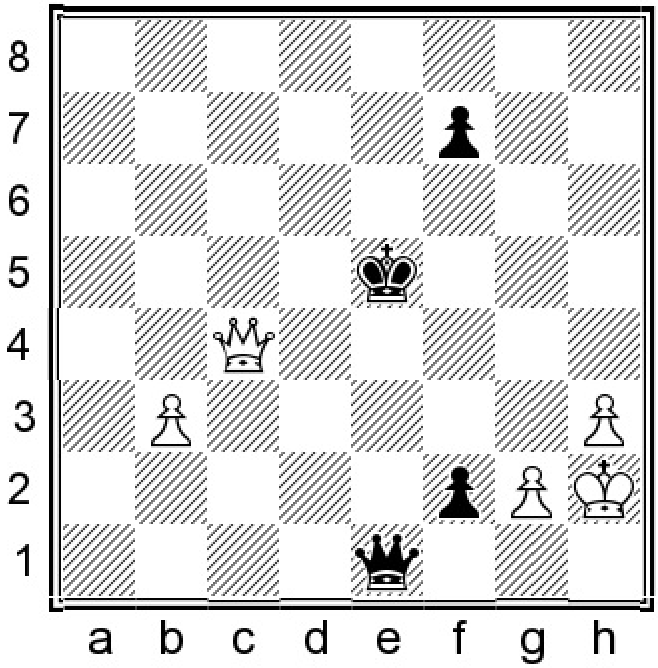
Series: The shield (Unzicker-Taimanov)



Position 1



Position 2



Position 3

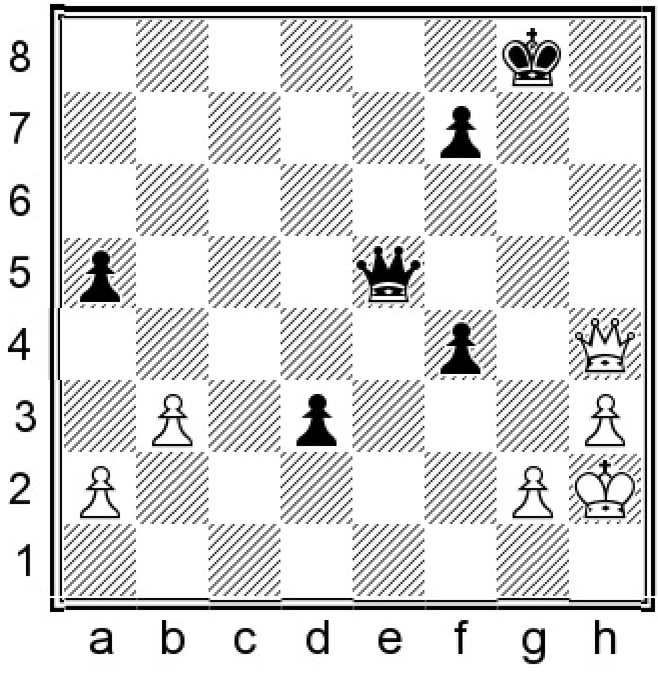
In the first position, without any shield, White achieves perpetual check: **11.♕c5+ ♔e4** 11...♔f6 12.♕b6+ ♔f5 13.g4+ ♔g5 14.♕c5+ ♔g6 15.♕f5+ ♔g7 16.♕g5+ ♔f8 17.♕d8=. **12.♕c4+ ♔e3 13.♕c5+ ♔d2 14.♕d4+ ♔c2 15.♕c5+ ♔d1 16.♕d4+ ♕d2 17.♕a1+ ♔e2 18.♕e5+ ♕e3 19.♕b2+ ♔f1 20.♕b1+ ♕e1 21.♕d3+**, with perpetual check.

In the second position, the only difference with the previous one is the inclusion of the pawn on b7. It forces White to check more carefully, but it is not enough for Black to avoid the draw: **11...♔f6 12.♕b6+! ♔g5** In this variation Black brings his king to the queenside. Instead, 12...♔f5!? allows Black to prevent perpetual check by using all the resources available, but it still leads to a drawn position: 13.g4+ ♔g5 14.♕d8+ f6 15.♕g8+ ♔f4 16.♕c4+ ♕e4 17.♕c1+ ♕e3 18.♕c4+ ♔f3 19.♕d5+ ♔e2 20.♕a2+ ♕d2 21.♕e6+ ♔f1 22.♕xf6=. **13.♕d8+ f6 14.♕g8+ ♔f4 15.♕c4+ ♔e5 16.♕c5+ ♔e6 17.♕c4+ ♔d6 18.♕d4+ ♔c6 19.♕c4+ ♔b6 20.♕d4+ ♔c7 21.♕c5+ ♔b8** The king has reached its destination, but there is no shelter here either. **22.♕d6+ ♔a7 23.♕a3+ ♔b6 24.♕d6+=**

In the third position, the difference is the inclusion of a pawn (a white one!!) on b3. In this case the black king heads for the zone behind this pawn and the checks come to an end: **11.♕c5+ ♔e4 12.♕c4+ ♔e3 13.♕c5+ ♔d2 14.♕d4+ ♔c2 15.♕c4+ ♔b2 16.♕d4+ ♔a2 17.♕a7+ ♔b1** and the checks have run out.

Having analysed several queen endings, it is easy to draw the following **Conclusion:** A far advanced passed pawn is the main winning plan, and perpetual check is the main drawing plan.

Wolfgang Unzicker 2515
Mark Taimanov 2500
Hoogovens 1981 (5)



White to move

In the diagram position, it is Black who has the passed pawn and White who is seeking perpetual check.

46.♕d8+?!

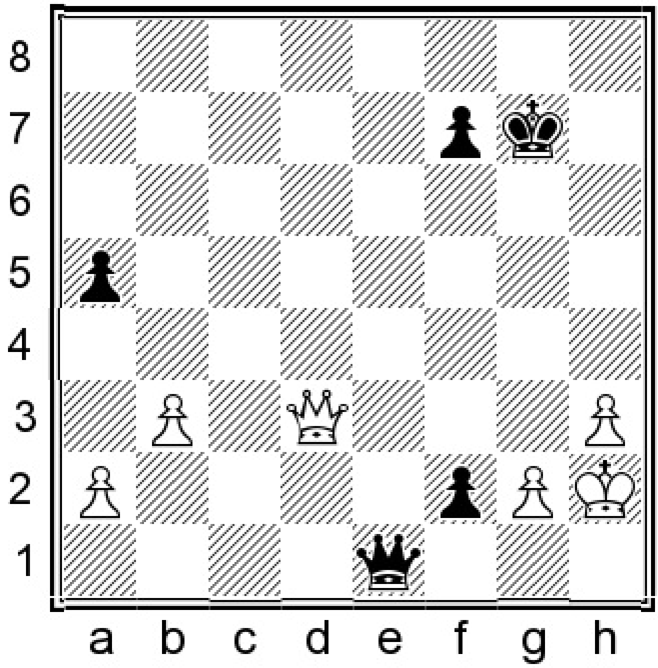
It is natural to jump at the chance to eliminate the far advanced passed pawn, but this allows a discovered check which creates another passed pawn of similar strength.

46.♔g1!? is a line based on a different plan: that of bringing the king closer to the passed pawn, which perhaps offers some chances of resistance, although it should lose in the end: 46...♕d6 47.♕g4+ ♔f8 48.♔f1 d2 49.♕d1 (the white queen is now in its most humiliating position, but in this case there is a threat of 50.♔e2, with a draw) 49...♕d3+ 50.♔f2 ♕e3+! (50...♔e7?! is less clear due to 51.♕e2+!) 51.♔f1 ♔e7 52.♕e2 ♔f6! 53.♕d1 (53.♕xe3 fxe3 54.♔e2 ♔e5, followed by ...♔d4-c3, wins) and now Black completes his task with a pawn sacrifice which blocks the white queen's most dangerous line for giving check: 53...f3! 54.gxf3 ♕d3+ 55.♔f2 ♔f5 56.h4 ♔f4, and White cannot prevent 57...♕e3, winning.

46.♕d8+?! ♔g7 47.♕xd3 f3+ 48.♔g1

48.g3 ♕e2+–+.

48...♕e1+ 49.♔h2 f2



The pawn is already on the seventh. Now Black just needs to evade the checks. Here the theme of this section, *the shield*, comes into play. This consists of one or more pawns which allow the king to hide from the enemy queen's checks. In this case these are the pair of pawns at a2 and b3. The task is even easier than the one we have seen in the previous diagrams, because the shield of white pawns is quite solid.

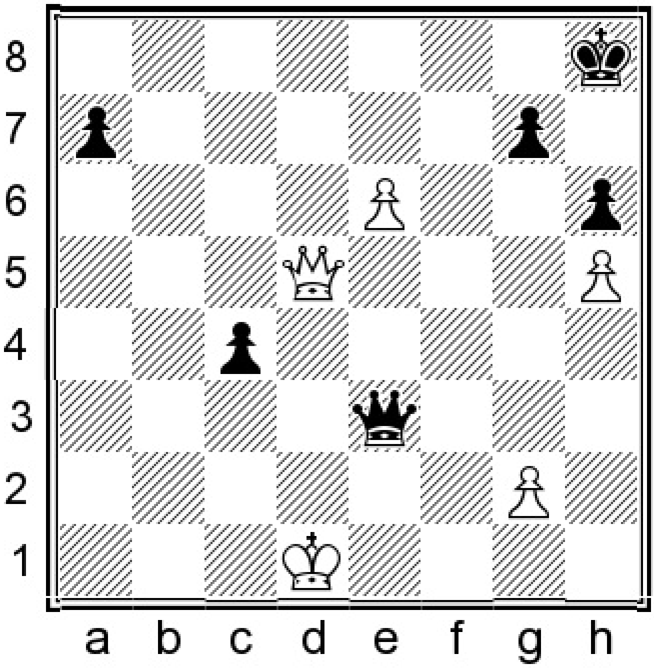
50.♕g3+ ♔f8 51.♕b8+ ♔e7! 52.♕c7+ ♔e6 53.♕c4+ ♔e5

The checks soon run out and White resigned. The continuation might have been: 54.♕c5+ ♔e4 55.♕c4+ ♔e3 56.♕c5+ ♔d3 57.♕c4+ ♔d2 58.♕d4+ ♔c1 59.♕f4+ ♔b2 60.♕d4+ ♔xa2 61.♕a4+

♔b1, and there are no more checks.

For the following position, we shall present the series of related diagrams at the end of the analysis. I think it will be very easy for an attentive reader to guess the result of each of them.

Irina Krush 2449
Vladimir Akopian 2700
Gibraltar 2007 (1)



White to move

We are going to observe another, essentially similar, situation. White's pawn on e6 is very dangerous, but her king is very open and her best defensive resources are the black queenside pawns.

45.♕d8+ ♔h7 46.e7!

White can make this advance with confidence. Despite her queen occupying a bad position on the edge of the board, the presence of enemy pawns, specifically the one on c4, allows the king to use them as a shield in its venture to escape from the checks.

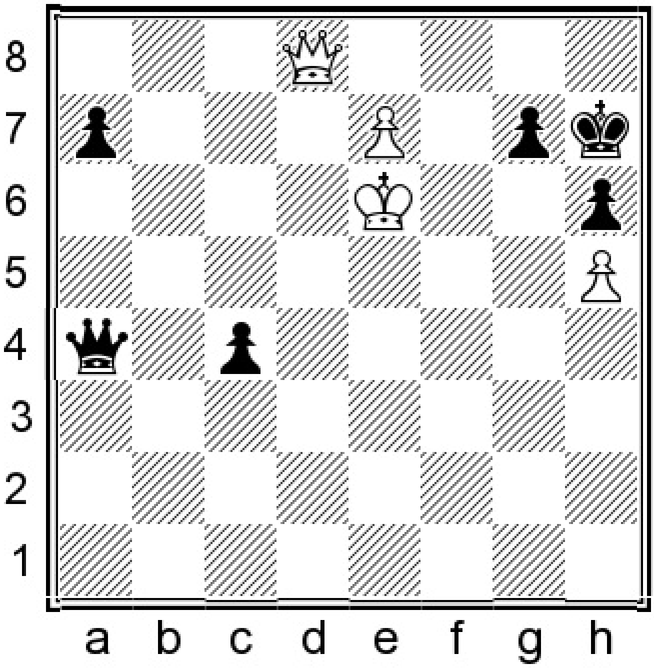
46...♕g1+ 47.♔c2 ♕xg2+ 48.♔c3 ♕f3+ 49.♔b4!

The white king is now partly hidden by the enemy pawns. But there are still some checks left to Black:

49...a5+

Offering the pawn, but White does not fall for it. There is another check to analyse: 49...♕b3+

50.♔c5 ♕a3+ 51.♔c6 ♕a4+ 52.♔c7 ♕a5+ 53.♔d6 (53.♔b8 ♕b5+ 54.♔a8 ♕c6+ makes no progress) 53...♕a3+ 54.♔d7 ♕a4+ 55.♔e6 and the pawn on c4 prevents the appropriate checks:



analysis diagram

55...♕c6+ 56.♕d6 ♕e4+ 57.♔d7 ♕f5+ 58.♔d8 ♕a5+ 59.♔d7+–.

50.♔c5!

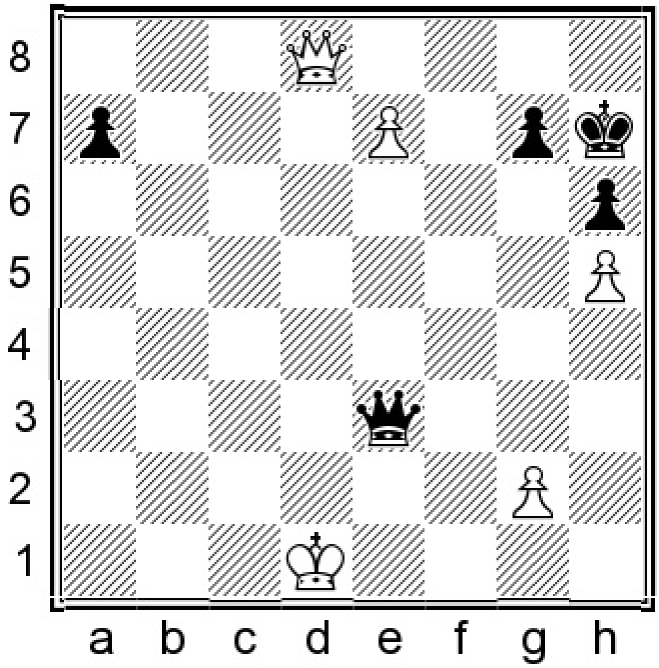
Continuing with the plan.

50...♕xh5+ 51.♔c6 ♕g6+ 52.♔c7 ♕g3+ 53.♔c8! 1-0

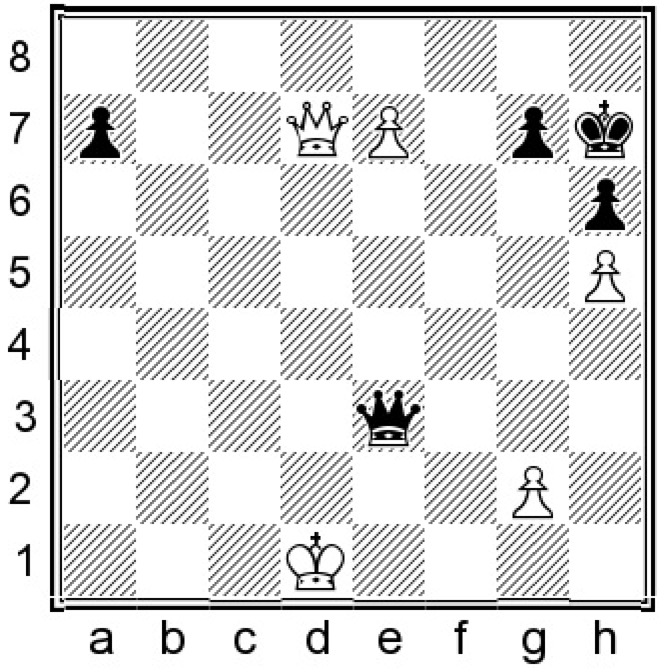
Once again it is the c4-pawn that prevents Black’s checks.

We now present some similar diagrams. Here we see what happens if Black has no c-pawn:

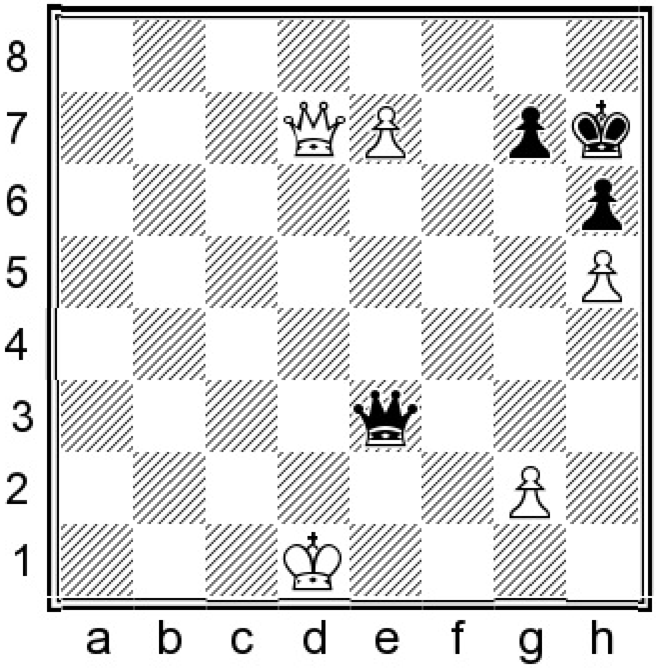
Series: The Shield (Krush-Akopian)



Position 1



Position 2



Position 3

In Position 1, having removed the pawn from c4, perpetual check is possible. **2...♕b3+** 2...♕g1+!? also achieves perpetual check: 3.♔e2 (3.♔c2 ♕c5+ 4.♔b3 ♕b5+=) 3...♕xg2+ 4.♔e3 ♕g3+ 5.♔d4 ♕f4+ 6.♔c5 ♕e3+ 7.♔c6 ♕e4+ 8.♔d7 ♕d5+=.

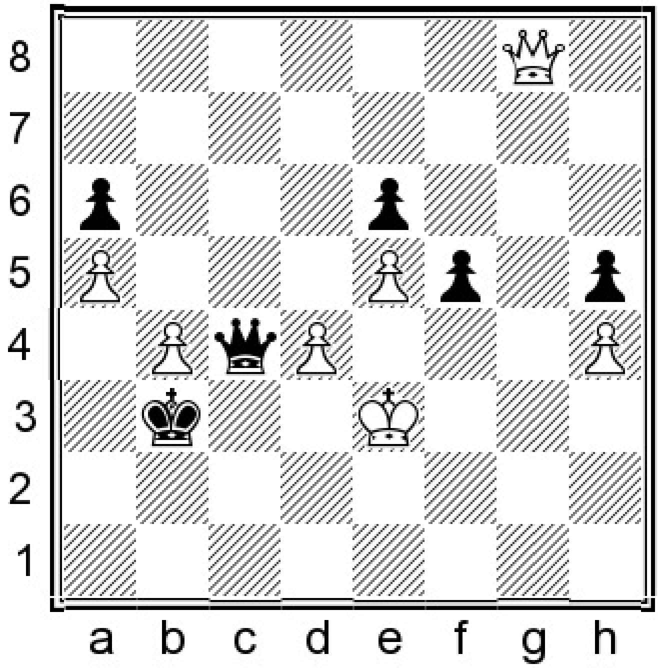
2...♕b3+ 3.♔e2 ♕e6+ 4.♔d3 ♕f5+ 5.♔c4 ♕c2+ 6.♔d5 ♕d3+ 7.♔e6 ♕e4+ 8.♔f7 ♕f5+ 9.♔e8 ♕b5+ 10.♕d7 ♕b8+, with a draw, because if **11.♔f7??** then **11...♕g8#**.

In the second position, with the white queen on d7 (away from the edge), no perpetual check is possible: **2...♕g1+ 3.♔c2 ♕f2+ 4.♔b3 ♕b6+ 5.♔c4** Here several of the ideal checks (on c6, e6 and c7) are unavailable. **5...♕a6+ 6.♔c5 ♕a5+ 7.♔d6 ♕b4+ 8.♔c7 ♕b6+ 9.♔c8 ♕c5+ 10.♔b7 ♕b4+ 11.♔a8 ♕e4+ 12.♕b7**, and the checks run out.

But in Position 3, we have removed the other element of the shield, the a7-pawn, and perpetual check is once again possible: **2...♕g1+! 3.♔d2 ♕f2+ 4.♔c3 ♕f6+ 5.♔b4 ♕b6+ 6.♔c4 ♕a6+ 7.♔c5** 7.♔b3 ♕b6+ 8.♔a2 ♕a5+=. **7...♕a5+ 8.♔c6 ♕a4+ 9.♔c7 ♕a7+=**

We shall complete this theme with a position in which the shield has another function.

Veselin Topalov 2700
Garry Kasparov 2715
Linares 1999 (7)



Black to move

The shield usually has the function of preventing perpetual check, but it can be enough for it to facilitate the activity the king, in order to allow other plans to be executed, such as a mating attack.

In this position, White is a pawn up and his pawns are more advanced, which can allow the creation of potentially more dangerous passed pawns. But Black has an interesting advantage – his king, hidden among the white pawns (!), can help the queen carry out a mating attack.

55...♔c3!

The black king approaches its white counterpart, setting up more serious threats than the capture of a pawn. For example, if 55...♔xb4?! 56.♕f8+ ♔xa5 57.♕d6 and White can continue with d4-d5 or else advance his king via the squares f4 and g5.

55...♔c3! 56.♕d8?

This natural move loses.

56.b5 was a better attempt and in fact it seems to lead to a draw: 56...♕xd4+ 57.♔f3 ♕d5+ 58.♔f2 axb5 59.♕c8+ ♔d2 (59...♔b4 60.a6 ♕d4+ 61.♔f1) 60.a6 ♕d4+ 61.♔f1.

56.♕g5, bringing the queen back in defence, also draws.

56...♕d3+ 57.♔f4

57.♔f2 f4! 58.♕g5 ♕xd4+ 59.♔e2 ♕d2+ 60.♔f1 ♕e3–+.

57...♕d2+

57...♔d2! would have been more spectacular and perhaps easier to play, threatening mate; after 58.♔g5 f4! White cannot prevent 59...♕f5, followed by 60...f3.

58.♔f3 ♕d1+ 59.♔e3?! ♕g1+!

The rest of the game would be better placed in the *Mate* section. The three black pieces (♕, ♔ and f-pawn) coordinate perfectly, thanks to the white queen's difficulties in giving check.

60.♔e2

A) 60.♔f4?! ends in a quick mate: 60...♔d3 61.♔f3 f4! (threatening two mates) 62.♕g5 ♕f1#;

B) 60.♔f3 was relatively more tenacious, although my engine indicates mate in 14: 60...♕f1+ 61.♔g3 (61.♔e3 f4+ 62.♔e4 ♔d2! and the mate with ...♕f1-d3-e3 cannot be prevented) 61...f4+ 62.♔h2 ♕e2+ 63.♔h1 f3 64.♕g5 f2–+.

60...♕g2+ 61.♔e3

If 61.♔e1 then 61...♔d3 also leads to mate.

61...f4+!

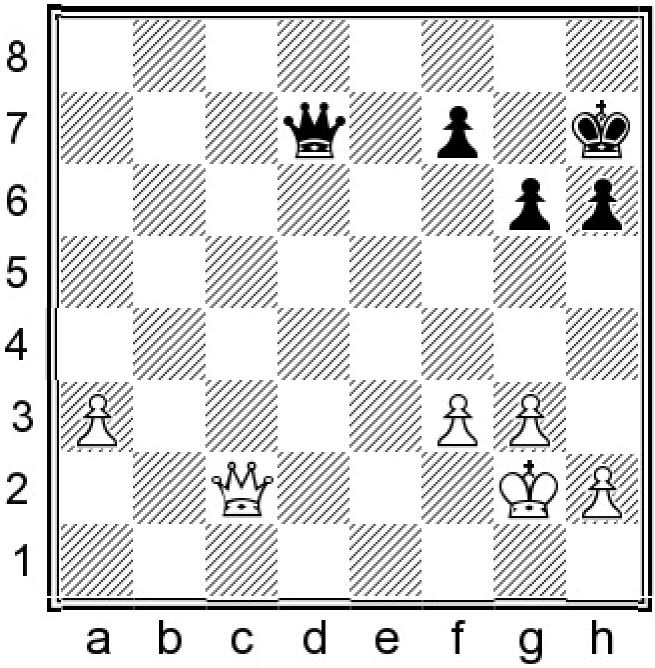
White resigned. If 62.♔xf4 ♔d3! 63.♕g5 ♕f2#.

Pattern 91 A passed a-pawn

Just as in rook endings, a situation frequently arising in queen endings is when there are just three pawns each left on the kingside and a single passed pawn on the queenside. We have all seen this at least once, although not so frequently as in rook endings. And the fact is that through not coming across it as often, it is natural that we know less about it. In this case the result depends not only on how far the pawn is advanced but also (and especially) on the solidity of the pawns protecting the king of the side with the material advantage.

The first position comes down to us from one of the most famous tournaments in history.

Alexander Alekhine
Samuel Reshevsky
AVRO 1938 (1)



White to move

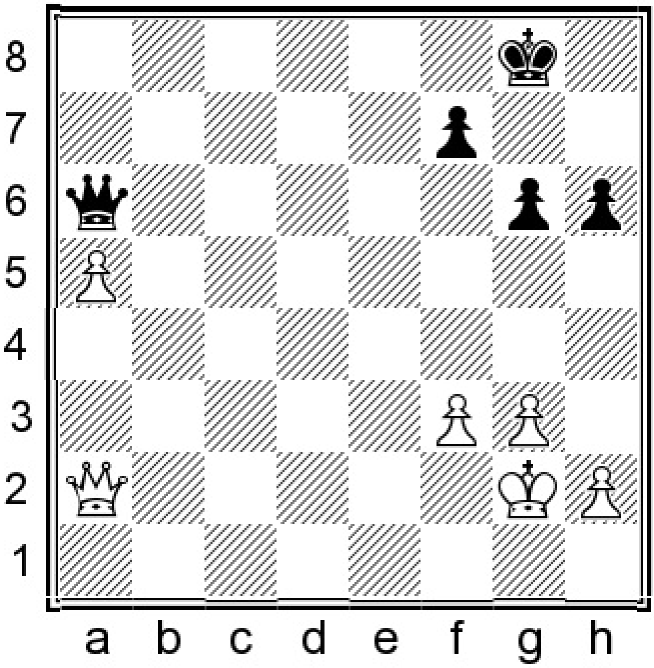
In the position of this game, White’s kingside pawn cover has already been weakened by the advance f2-f3 and, as we shall see, it seems that this defect is sufficient to enable Black to draw.

44.♕a2!

The queen takes up an ideal position. Black must blockade the pawn and seek perpetual check.

44...♔g8 45.a4 ♕c6 46.a5 ♕a6

The black queen has blockaded the passed pawn. The next step in White’s plan should be to lift the blockade by bringing his queen to b6, but in that case his king is easily checked.



47.g4

Let us also check the immediate attempt to lift the blockade: 47.♕d5?! ♕e2+! 48.♔h3 (48.♔g1 ♕e1+ repeats the position, so the king must advance) 48...h5! 49.♕e4 ♕f1+ 50.♔h4 ♕f2 and now 51.h3?! even gets White into difficulties (51.♔h3 allows a repetition with 51...♕f1+=): 51...♕c5 52.a6 ♔g7. The black king approaches to close the mating net and White has only one move to escape with his king and avoid loss: 53.♕e1! ♔h6 54.g4!=.

47...g5

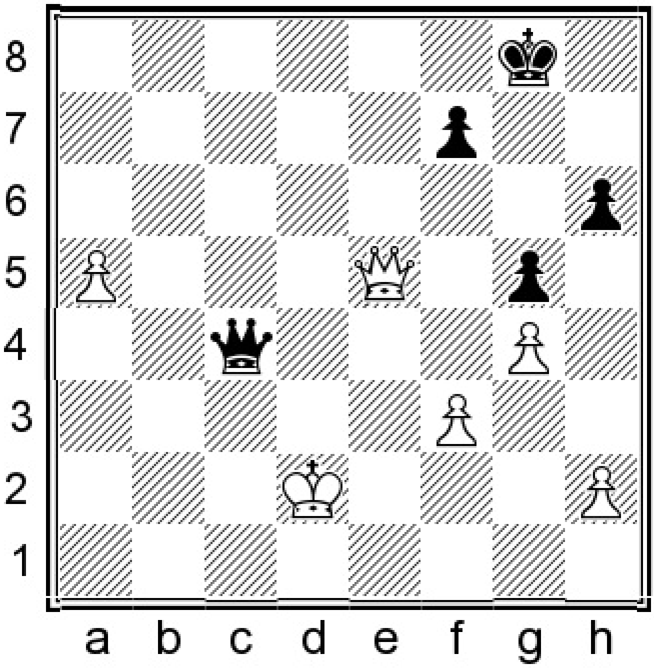
It is good to gain some space and prevent being squeezed by the enemy pawns.

48.♔f2 ♕d6 49.♔f1 ♕a6+ 50.♔g2 ♔g7 51.♕b2+ ♔g8 52.♕b8+ ♔g7 53.♕e5+ ♔g8 54.♔f2

Alekhine tries to bring his king across, in view of the fact that he will be unable to advance the pawn with the support of the queen alone.

54...♕a7+ 55.♔e2 ♕a6+ 56.♔d2 ♕c4!

Probably not the only move, but it is a good measure to prevent the king from approaching the passed pawn.



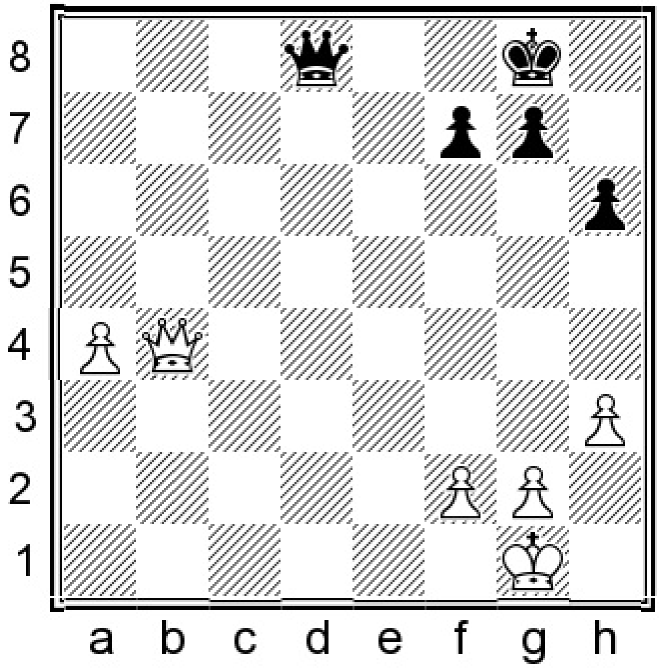
57.♕f5?

This allows an immediate perpetual. But other lines do not seem to offer many winning chances: 57.h3 ♕a2+ 58.♔d3 ♕b3+ 59.♕c3 (59.♔d4 ♕b2+ 60.♔e4 ♕e2+ 61.♔d5 ♕b5+ 62.♔d6 ♕b8+ with a perpetual using the mechanism of *the wheel*) 59...♕b7 60.♔c2 ♕a6 61.♔b3 ♕b7+ 62.♔a3 ♕a6 63.♔a4=.

57...♕d4+ 58.♔e2 ♕b2+ 59.♔d3 ♕b3+ 60.♔e2 ♕b2+ ½-½

Now we shall analyse a position in which the king’s position has not been weakened.

Sergey Fedorchuk 2643
Eric Hansen 2557
Cappelle-la-Grande 2013 (7)



Black to move

Here we have a case with the pawn still on f2, which offers better cover against checks. In general this structure should win.

36...♕d1+ 37.♔h2 ♕c2?!

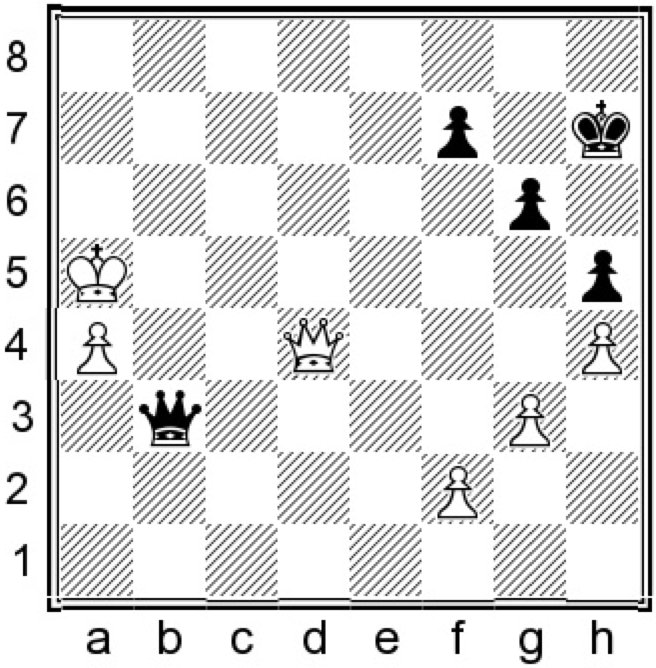
Black is not in time to capture the f2-pawn, so he will need to look for ways to stop the advance of the a-pawn, before creating threats of perpetual check. For example: 37...♕a1 38.a5 (White plans to play ♕b6 and a5-a6-a7) 38...h5!? 39.♕b6 ♕e5+ 40.g3 ♔h7 (40...h4? is bad due to 41.♕d8+) 41.h4! (41.a6 is the way to win by means of brute-force calculation: 41...h4 42.a7 hxg3+ 43.♔g2!+–) 41...g5 42.♕e3 ♕xa5 43.♕xg5 ♕b6 44.♕xh5+ ♔g8 45.♕f5+–.

38.a5! ♕xf2 39.♕b8+

The queen gains an ideal square, from where it prevents checks on the h2-b8 diagonal and supports the pawn all the way. It was natural for Black to resign here.

Now we shall see a position where the stronger side's king has left its castled position.

Vladimir Baklan 2618
Gadir Guseinov 2510
Batumi Ech 2002 (5)



Black to move

Here we have a curious case. White’s kingside pawn structure is appropriate for covering the checks, but his king is on the outside. White now tries to hide his king away and Black prevents it:

60...♕b7 61.♕c5 ♕a8+ 62.♔b4 ♕e4+ 63.♔b5 ♕b7+ 64.♔c4 ♕e4+ 65.♕d4 ♕c6+ 66.♔d3 ♕f3+ 67.♔d2 ♕a8 68.♔e2 ♔g8 69.♕b4 ♕a6+ 70.♔e1 ♕d3 71.a5 ♔h7 72.♕a4 ♕a6 73.♕a3 ♔g8 74.♕a2 ♔f8?

74...♕c6! activates the queen and prevents the advance of the pawn, indirectly of course: 75.a6 ♕e4+ 76.♔f1 ♕h1+ 77.♔e2 ♕e4+ 78.♔d2 ♕d4+ 79.♔c1 ♕c3+, with a typical perpetual check set-up.

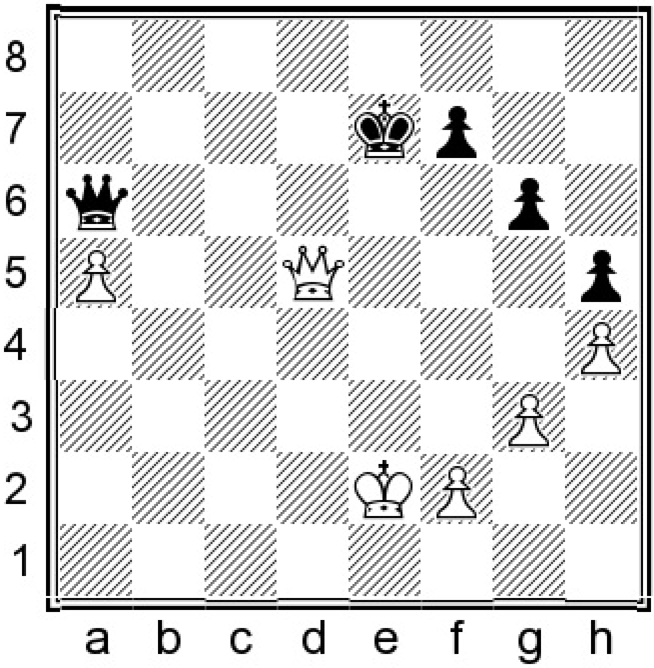
75.♕d5 ♔e7?

Why did the black king come out? Perhaps Black thought that he would have time to capture the a-pawn. In fact it was already too late to hide with 75...♔g8 since after 76.♕d8+ ♔h7 77.♕c7 ♔g7 78.♕b6 the pawn advances.

76.♔d2

Or 76.♕c5+ ♔d7 77.♔d2 ♕b7 78.♔e3 ♕a6 79.♕b6 and the pawn advances.

76...♕a7 77.♔e2 ♕a6+



Once again we are in another chapter in the battle between the white king trying to hide behind his kingside pawns and the black queen trying to prevent this.

78.♔e3

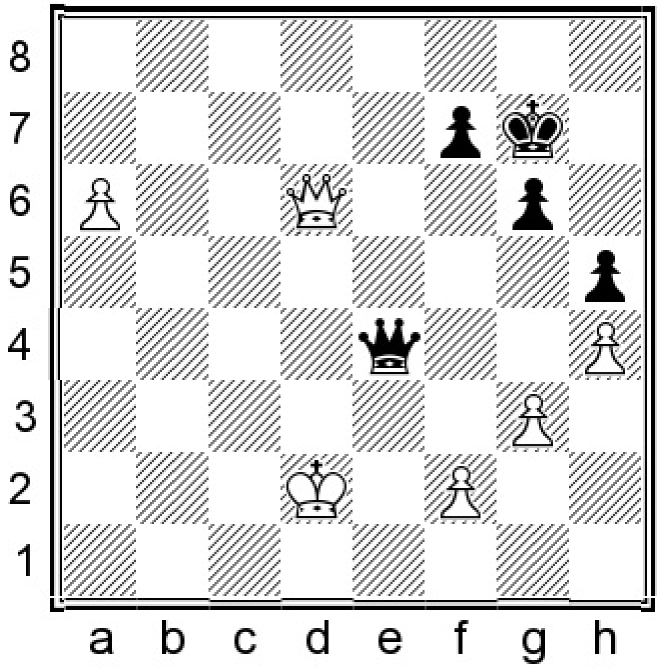
78.♔f3 looks like the normal move to try to hide. After 78...♕f1 79.♕c5+ ♔f6 80.♕d4+ ♔e7 81.♕b4+ ♔f6 82.♕a4 the a-pawn is threatening to advance and then following 82...♕a6 83.♕d4+ ♔e7 84.♕c5+ ♔e8 85.♔g2 White's king is hidden away, which we know from the previous example is almost a guarantee of victory.

78...♕f1 79.♕e5+

Or 79.♕c5+ ♔e6 80.♕c6+ ♔e7 81.♕a4 ♕a6 (after 81...♕e1+?! 82.♔f3! the white king finds shelter and White should win) 82.♕b4+ ♔d7 83.♕b6+–.

79...♔f8 80.♕h8+

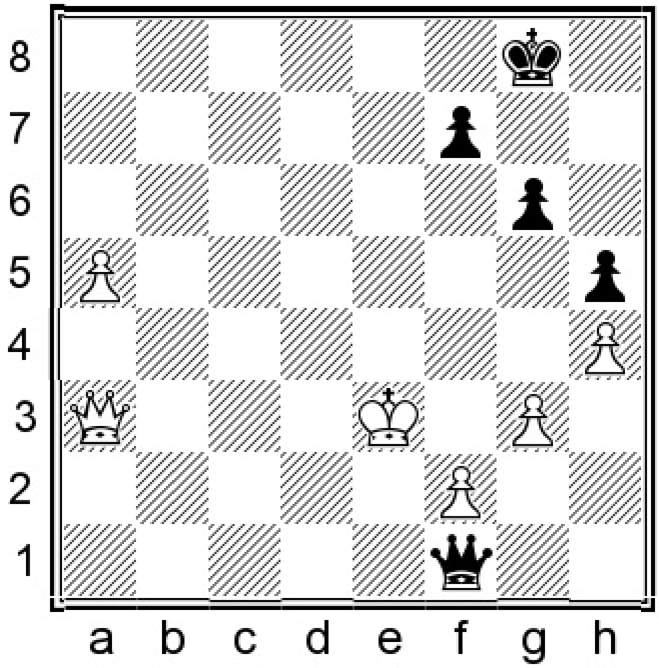
A strange adventure. Instead, it seems that White can improve his queen and advance the pawn, e.g. 80.♕d6+ ♔g7 81.a6 ♕e1+ 82.♔f3 ♕h1+ (82...♕a5 83.♔g2 ♕a4 84.♕b6 ♕e4+ 85.♔g1+–) 83.♔e2 ♕e4+ 84.♔d2.


8
7
6
5
4
3
2
1
a b c d e f g h

analysis diagram

The white queen now prevents the five possible checks. 84...♕c4 85.♕b6 ♕d5+ 86.♔e3 ♕e5+ 87.♔d3 ♕f5+ 88.♔e2 ♕e4+ 89.♕e3 ♕c4+ 90.♕d3 ♕c6 (90...♕a2+ 91.♔f1!+–) 91.♕d4+ ♔h7 92.a7 ♕a6+ 93.♔e1 ♕c6 94.♔f1 ♕h1+ 95.♔e2 ♕c6 96.f3 ♕c2+ 97.♔e3 ♕c1+ 98.♔f2 ♕c2+ 99.♔g1 ♕a2 100.g4 and White wins.

80...♔e7 81.♕c3 ♔f8 82.♕a3+ ♔g8!


8
7
6
5
4
3
2
1
a b c d e f g h

The king is much better here, not allowing checks on the long diagonal.

But White can still win by using his queen to prevent checks on the fourth rank and threatening to advance the pawn.

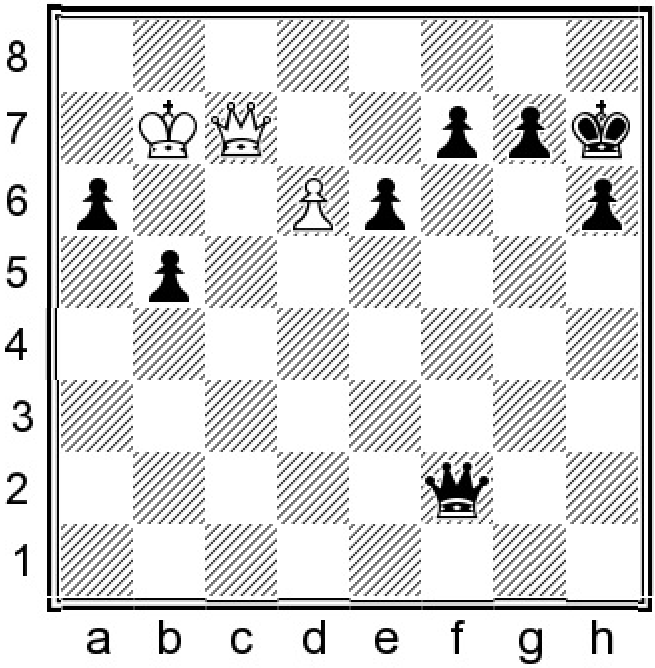
83.a6?

The winning line is 83.♕a4 ♕a6 84.♔d2 ♔g7 85.♕d4+ ♔g8 86.♕b6 and the pawn advances.

83...♕e1+ 84.♔f3 ♕h1+ 85.♔e2 ♕e4+

Black has once again reached a good circuit for giving check and despite White's persistence Black gained a draw on move 149.

Pattern 92 A more advanced passed pawn



An advanced passed pawn is an important element in any ending, but is much more so in a queen ending. There are at least three reasons and they are very easy to understand:

1) giving up a piece for a passed pawn is a high price to pay, but the queen is a price which is unaffordable;

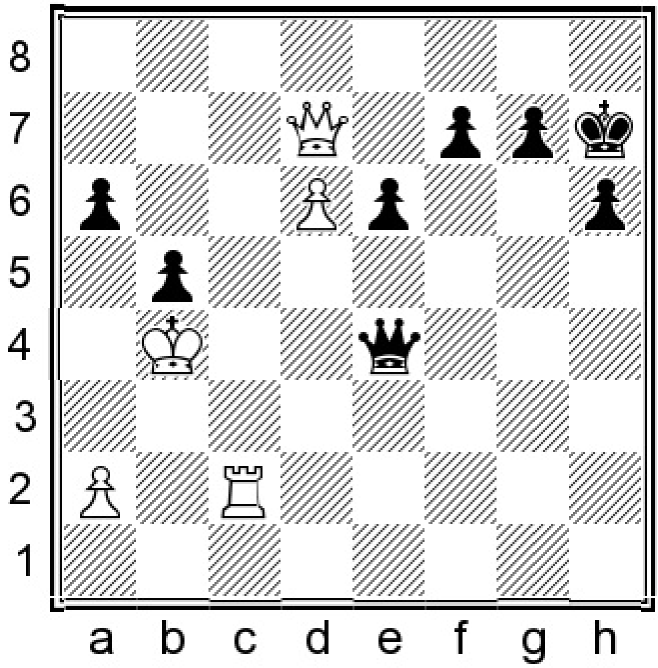
2) a piece loses activity when it acts as a blockader, but the queen loses far more (although it can be argued that the rook loses even more);

3) in a queen ending it is more difficult to establish a stable blockade of a passed pawn with the king, although with some help from the queen it is possible.

The result of all these factors means that, in a queen ending, having the much further advanced passed pawn is usually a decisive advantage, and it is almost always better to have a far advanced passed pawn than to be several pawns up.

Magnus Carlsen 2840

Dmitry Jakovenko 2704
Doha WCh Rapid 2016 (8)



White to move

We begin with an impressive demonstration by the current World Champion.

This position allows us to see the strength of an advanced passed pawn much better than any schematic diagram. Black is four pawns up and if the white king moves back to defend the rook Black will give perpetual check.

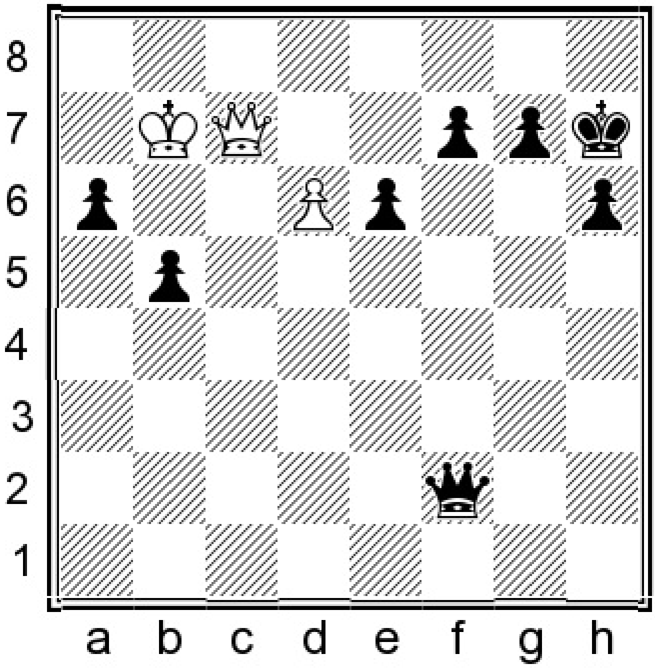
47.♔a5!

White sacrifices the rook, evades checks by the black queen and relies on the strength of his d6-pawn.

47...♕xc2 48.♕c7!

And now White gives up the a-pawn to gain a tempo. This is the only move to win.

48...♕xa2+ 49.♔b6 ♕f2+ 50.♔b7



The diagram teaches us the concept in the starkest possible manner. The whole board is teeming with black pawns and almost barren of white pawns, but in queen endings a more advanced passed pawn counts for more than the number of pawns. White wins.

50...b4

Automatically pushing the pawn, but the white pawn will queen much faster.

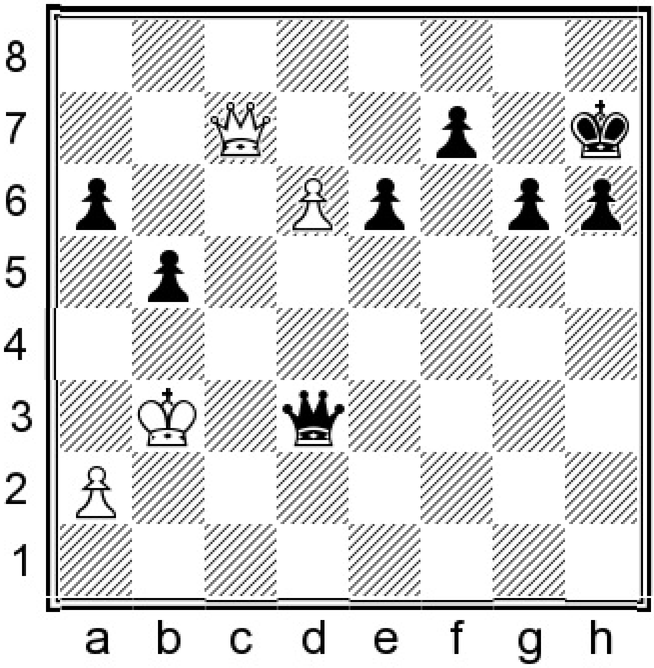
51.d7 b3 52.d8=♕ ♕f5

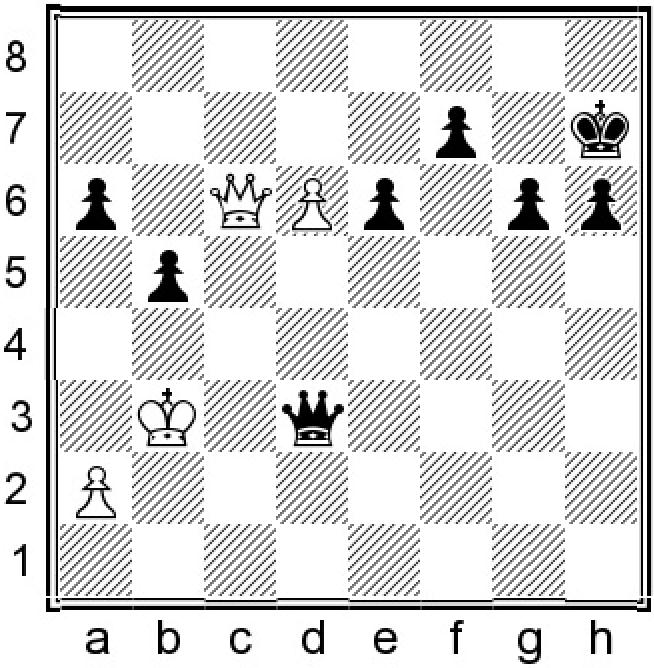
52...b2 53.♕d3+ is hopeless.

53.♕c3 1-0

We round off this example with two similar diagrams, which take us back to our thoughts on perpetual check in the previous section.

Series: Carlsen-Jakovenko



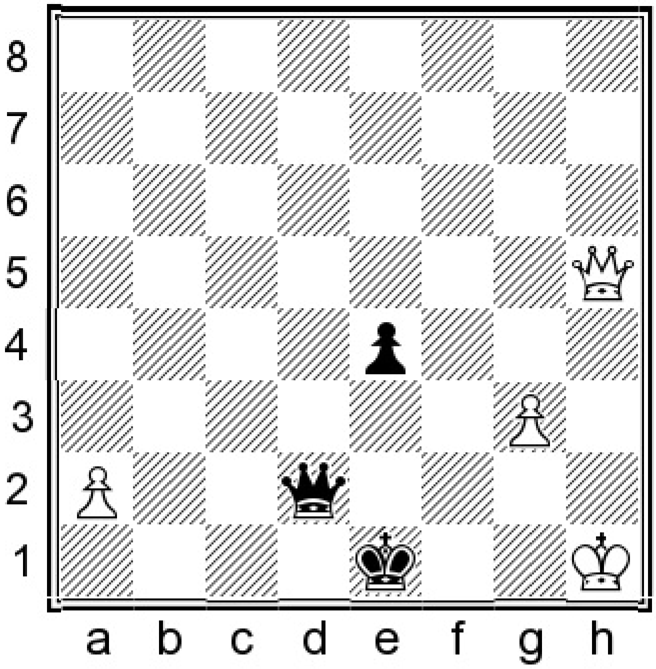


In the first diagram, with **1.♔b4 ♛d2+ 2.♔c5** the king evades the checks.

But in the second diagram, with the queen on c6, the king has no escape route, as long as Black gives the right checks: **1.♔b4 ♛d2+!** (not 1...♛d4+? 2.♔a5 and the king escapes) **2.♔c5 ♛e3+** and the king cannot hide.

Here is another example featuring an advanced passed pawn. In this example we are going to see how difficult queen endings can be and how it is almost impossible to play them without making mistakes. We shall also have another example showing that how far a passed pawn is advanced can be more important than the number of pawns. But we are also going to discover another important factor: the proximity of the defender's king to the passed pawn can make a serious contribution towards impeding its advance.

Frank Marshall
Siegbert Tarrasch
Ostend 1907 (3)

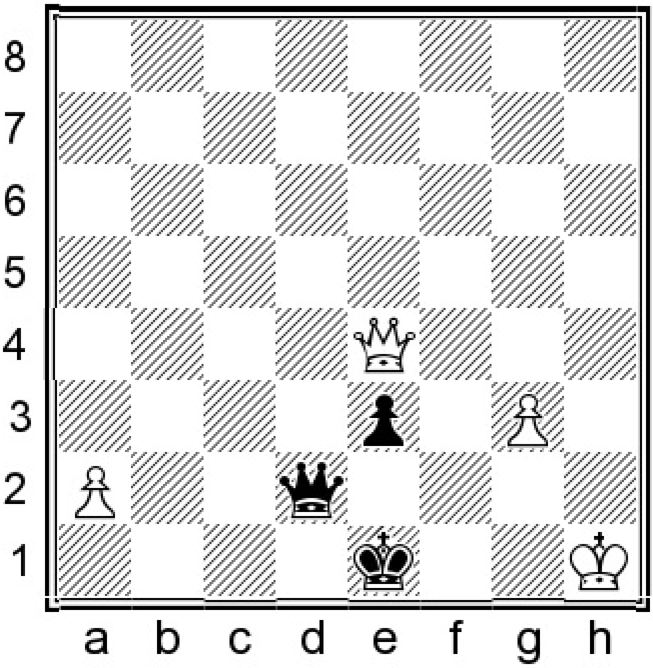


White to move

72.g4?

White abruptly goes wrong and permits the speedy promotion of the black pawn. It is strange that White is initiating a queening race, since he is starting far behind his opponent.

Neverthless, the position is still a draw, thanks to the excellent location of the white king, which can approach in order to assist in the blockade of the black pawn. For example: 72.♕f5! e3 73.♕e4!.



analysis diagram

This is the ideal square. With the queen here, the position would be a draw in the absence of either of the two pawns. In fact, White would lose (with or without pawns) if his king were in almost any other position than the lower right-hand corner where it now stands.

73...e2 74.♔g2!= (here we can see the collaboration of the king) 74...♕c3 (74...♔d1 75.♕b1+ ♕c1 76.♕d3+=) 75.♕d5 (preventing the black king from emerging at d2) 75...♕d2 76.♕e4=.

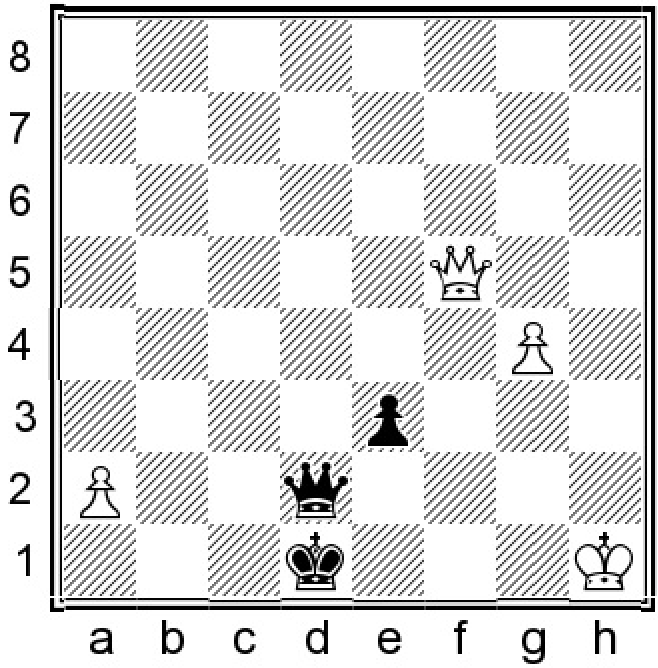
72.g4? e3

The pawn at g4 hinders White's defence, as does the a2-pawn in some variations. Without these pawns it would be a draw.

73.♕c5

Or 73.♕e5 e2 74.♔g2 ♔d1–+ 75.♕a1+ ♔c2–+.

73...♔d1 74.♕f5



74...♕f2?

Allowing a thematic perpetual.

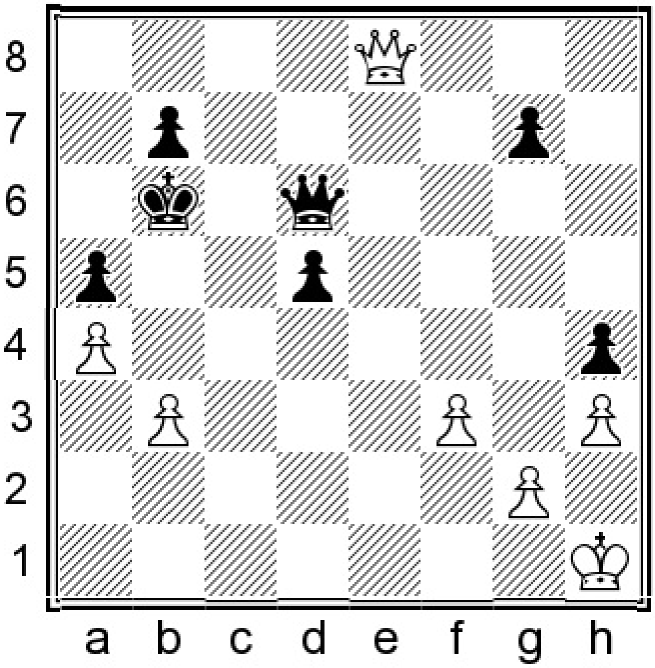
It is not unusual that centralisation with 74...♕d4! soon leads to the queening of the pawn: 75.a4 e2 76.♕b1+ ♔d2 77.♕a2+ ♔e3 78.♕b3+ ♔f2 79.♕f7+ ♔g3 80.♕b3+ ♔h4 and Black wins.

75.♕b1+ ♔e2 76.♕b5+ ♔f3 77.♕d5+ ♔g3 78.♕e5+ ♔xg4 79.♕e4+ ♔h3 80.♕e6+ ♔g3 81.♕e5+ ♔f3 82.♕d5+ ♔e2 83.♕b5+ ♔d1 84.♕b1+ ♔d2 85.♕b2+ ♔e1 86.♕b1+ ♔e2 87.♕b5+

Draw.

And now a position with a less advanced pawn.

Maxim Matlakov 2684
Vladimir Kramnik 2796
Doha 2015 (5)



Black to move

How should we evaluate this position? Black has the only passed pawn and the queen is pushing it from behind. This is an important factor. So White must try to compensate for this, and in the absence of any active possibilities his only option is to look for perpetual check and use this to maintain equality in the position.

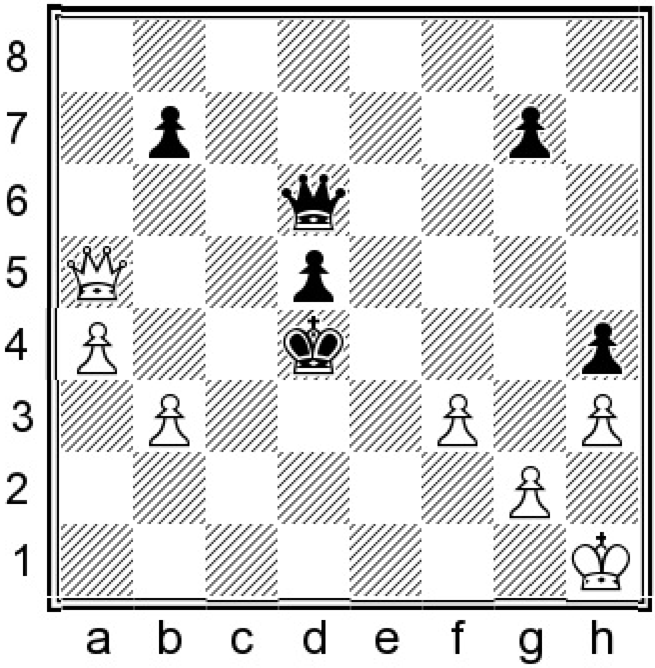
57...♔c5!

Black chooses to fight. In sending his king into the zone where there are some possible *shields* and it can hide from the checks, he will have to give up a pawn and therefore lose material equality, but at some point he will be able to use a free move to advance the pawn.

58.♕b5+?

Capturing the pawn is bad. It sends the black king where it wants to go or is most useful. 58.♕e1! was the right way to establish a blockade before the pawn reaches the seventh rank, and this would also prepare frontal checks which would force the black king back. Possibly Black would have retreated the king. 58...d4 is the only winning attempt (58...b6?? certainly defends the pawn but allows 59.♕c3#; 58...♔b6!? returns to the game position): 59.♕xa5+ ♔c6 60.♕b5+ ♔c7 61.♕d3 ♕e5 62.♕c4+ ♔b8 (now White can bring his king closer) 63.♔g1 ♔a7 64.♔f1 ♕e3 65.♕c5+=.

58...♔d4 59.♕xa5



59...♔d3!

This scenario, with an active king making way for the pawn and ready to hide from the checks behind the shield of the enemy pawns, is a classic in queen endings. From now on, despite his material advantage, White finds it difficult to oppose Black’s elementary plan of advancing the passed pawn. We shall consider various attempts in the next few moves.

60.♕b5+ ♔c3 61.♕a5+ ♔c2 62.♕e1?!

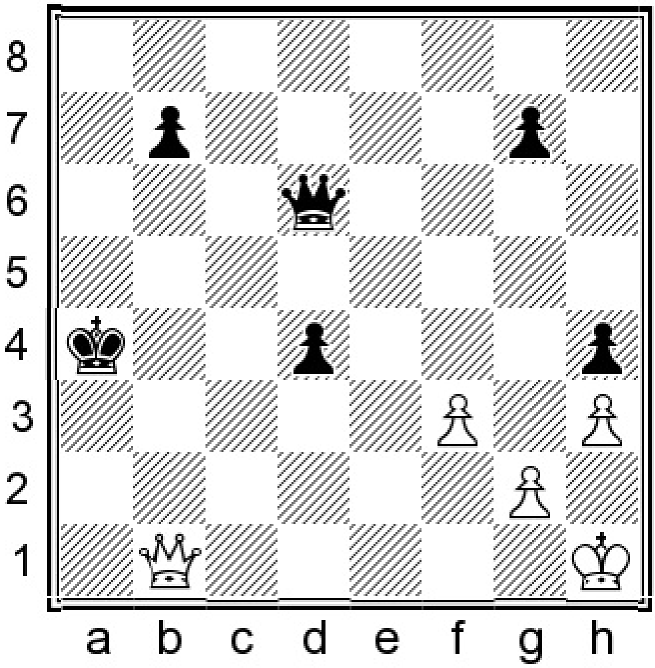
It is too late now for the blockade, curiously because the black king hinders it. 62.♕b5 d4! 63.♕e2+ ♔xb3 64.♕d3+ ♔xa4–+.

62...d4

Natural and good enough. But 62...♕f4!, threatening 63...♕c1, seems stronger, e.g. 63.♕f2+ ♕d2 64.♕xh4 d4, and although White has won two pawns, there is now no way to stop the black passed pawn.

63.♕e2+ ♔xb3 64.♕d1+ ♔b4 65.♕b1+ ♔xa4

Finally the black king has captured the pawns and, as we shall see in the following variation, it can evade the checks and exploit his main trump, the passed d-pawn.



66.♕xb7?!

This makes things easy for Black. With the black queen centralised, there is no perpetual check. The critical variation would be 66.♕a2+ ♔b5 67.♕b3+ ♔c6 68.♕c4+ ♕c5 69.♕e6+ ♔b5 70.♕b3+ ♕b4 71.♕d5+ ♔b6 (71...♔a6 72.♕e6+) 72.♕d8+ ♔c5 73.♕c7+ ♔b5 74.♕xb7+ ♔c4 75.♕c6+ ♔b3 76.♕d5+ ♕c4 77.♕b7+ ♔c2 78.♕e4+ ♕d3 79.♕xh4 ♕c3 80.♕e4+ d3–+.

66...d3 67.♕b2 d2 68.♕a2+ ♔b5 69.♕b2+ ♕b4 70.♕c2 ♕d4 71.♕b3+ ♔c5 72.♕c2+ ♔b4 73.♕d1 ♕b2 0-1

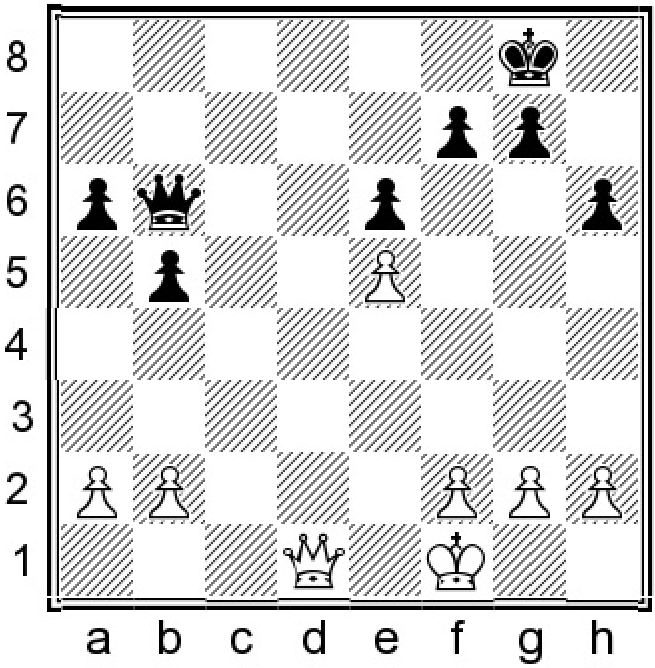
Pattern 93 Centralised queen

The queen is a piece which is easily activated, but it is difficult to unbalance a position where there are no passed pawns and where the kings are completely safe. Nevertheless, in some cases, a queen is able to take up a commanding position and then gradually use its activity to dominate its counterpart.

This usually happens when at least one of the following two factors is present: superior centralisation, and/or the presence of weak pawns which limit the action of the opposing queen, and for these factors to carry any weight, it is essential to have a completely safe king.

We shall begin with an example from a very well-known classic game, because Maroczy's display of technique is really impressive.

Frank Marshall
Geza Maroczy
Ostend 1905 (5)



Black to move

27...♕c5!

By attacking the e5-pawn the black queen gradually begins to take up a more active position than its opponent.

28.♕d8+

If 28.f4? ♕c4+, and White is already losing a pawn.

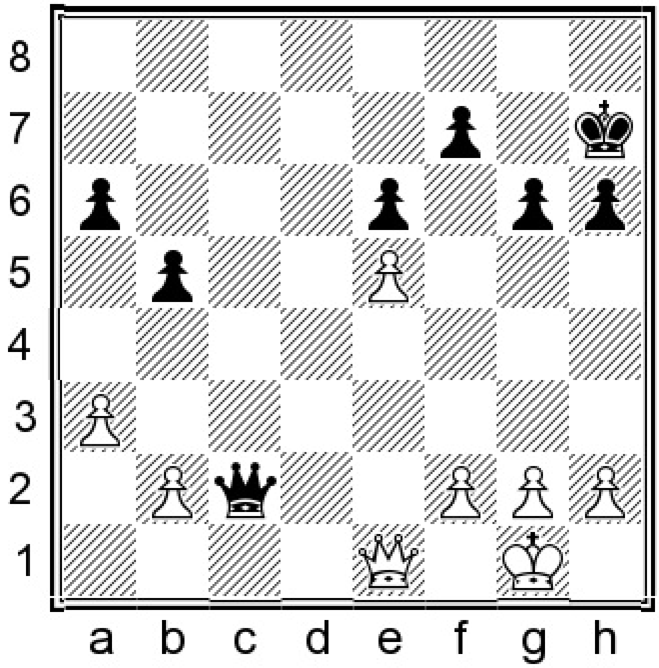
28...♔h7 29.♕d3+ g6 30.♕c3 ♕d5!

Black keeps his queen ideally centralised. It now attacks the pawns at e5 and a2. The white queen is unable to become active because it has to defend the pawns. With the black king securely hidden away, it is futile for White to look for perpetual check.

31.a3!?

31.b3 looks worse, because the weakness at a2 is further away from the one on e5 and it appears more difficult to defend both at the same time: 31...♕d1+! 32.♕e1 ♕d3+ 33.♔g1 ♕c2 (now the a2-pawn is attacked) 34.♕a1 b4! 35.g3 (35.f4 ♕c3 36.♕f1 ♕d4+ 37.♔h1 ♕b2 and a pawn falls) 35...a5 36.h4 ♕c3 and the e5-pawn is lost.

31...♕d1+ 32.♕e1 ♕d3+ 33.♔g1 ♕c2!



34.♕a1!

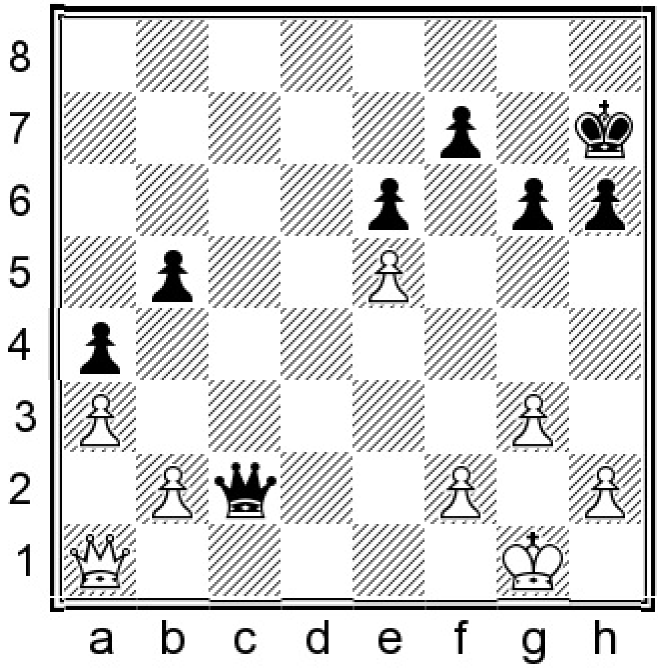
The white queen has ended up adopting one of the most passive positions imaginable. It is hard to accept that this is the best move, but the engines also endorse it. 34.b4?! is a more natural move, but Black wins a pawn immediately with 34...♕b2.

34...a5! 35.g3

After 35.b4? axb4 36.axb4 ♕e4 Black once again wins a pawn and this time it is a very important one.

35...a4

Fixing the pawns.



36.f4?

It is very difficult to maintain a passive defence for a long time without getting desperate. This move permanently defends the e5-pawn but it increases the strength of the black queen, which is now active along the entire seventh rank and has more possible checks.

Instead, after 36.h4! ♔g8 37.♔f1 it would not have been easy for Black to make progress, e.g. 37...♕e4?! would allow the white queen to spring back to life with 38.♕e1!=.

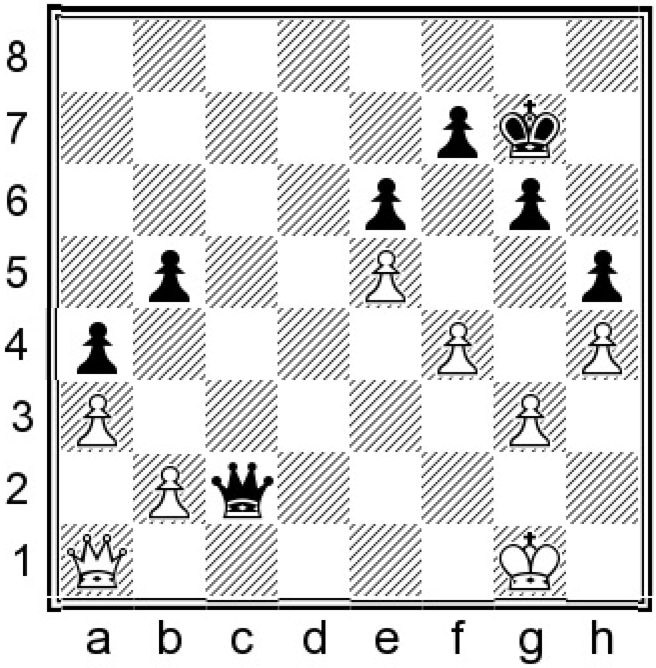
36...♔g8

The white position is so passive that even with queens on the board Black is able to create a position of zugzwang. 36...h5!? was possible immediately, preparing to create new weaknesses.

37.h3

37.♔h1 h5 38.h4 ♔h7 39.♔g1 ♔g7 40.♔h1 ♕f2! and the pawns start to fall; 37.♕a2?! ♕d1+ 38.♔g2 ♔g7 and a new zugzwang. It is striking that the white queen has no moves.

37...h5 38.h4 ♔g7



An impressive unilateral zugzwang position (Black could force it, if it were his move), which we could well call one of total domination.

39.♔h1

If 39.♕a2?! then 39...♕d1+ 40.♔f2 ♔f8 and once again the white queen has no moves, while if 39.♔f1?! ♕h2–+.

39...♕f2!

Now White cannot maintain material equality any longer.

40.♕g1 ♕xb2 41.♕c5

This counterattack in search of perpetual check comes very late.

41...b4! 42.f5

42.♕e7 b3! 43.♕f6+ ♔g8 44.♕d8+ ♔h7 45.♕e7 ♕b1+ 46.♔h2 ♕f5!–+.

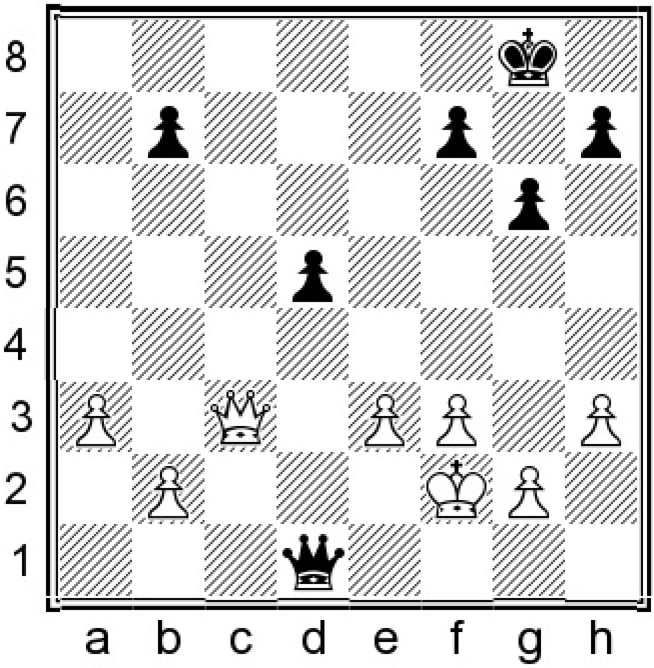
42...exf5 43.e6 bxa3 44.exf7

44.e7 a2 45.e8=♘+ ♔g8 and there are no more checks.

44...♔xf7 45.♕c7+ ♔e6 46.♕c6+ ♔e5 47.♕xa4 a2 48.♕e8+ ♔d5 49.♕d7+ ♔e4 50.♕c6+ ♔e3 51.♕c5+ ♕d4 52.♕a3+ ♕d3 0-1

The hero of our previous example was the one who had to cope with a passive position here, but the great Alekhine did not really put him to the test.

Alexander Alekhine
Geza Maroczy
New York 1924 (14)



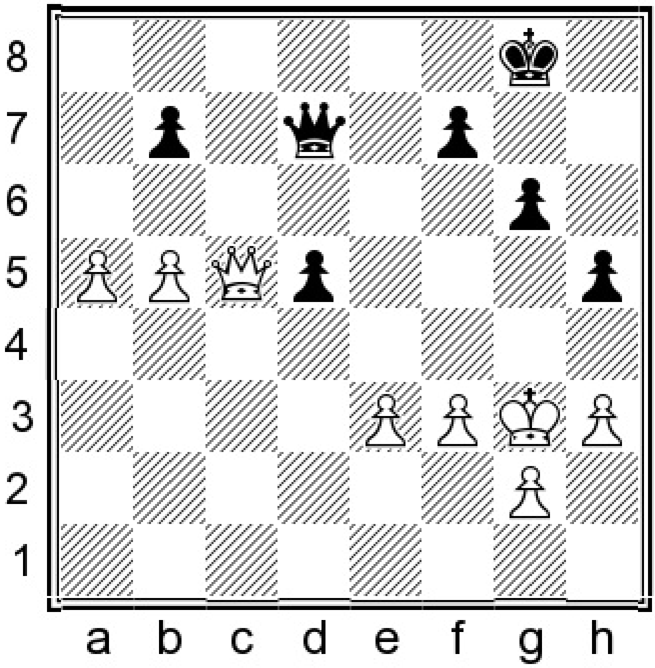
White to move

The events of this game could also be studied as an example of perpetual check, but in this case I want to highlight the defects of decentralisation, versus the virtues of its opposite.

30.♕c8+?!

Alekhine was a great endgame player and very expert in positions with major pieces, although he might not yet have reached his technical peak here and he commits one of the most typical practical errors: faulty calculation (he probably missed 32...d4) while rushing to gain material.

Centralisation with 30.♕d4! prevents perpetual check and forces the opponent to accept a passive position for his own queen, which would probably have ended badly: 30...♕c2+ 31.♔g3 (threatening to take the d5-pawn, because if Black then captured on b2 White could force the exchange of queens) 31...♕c6 (31...♕b3 also fails to prevent 32.a4) 32.a4! and with the black queen so passive it is easy for White to make progress with his pawn majority: 32...h5 33.♕f4 (33.a5? ♕c7+) 33...♔g7 34.♕e5+ ♔g8 35.a5 ♕b5 36.♕c3 ♔h7 37.b4 ♔g8 38.♕c5 ♕d7 39.b5+–.



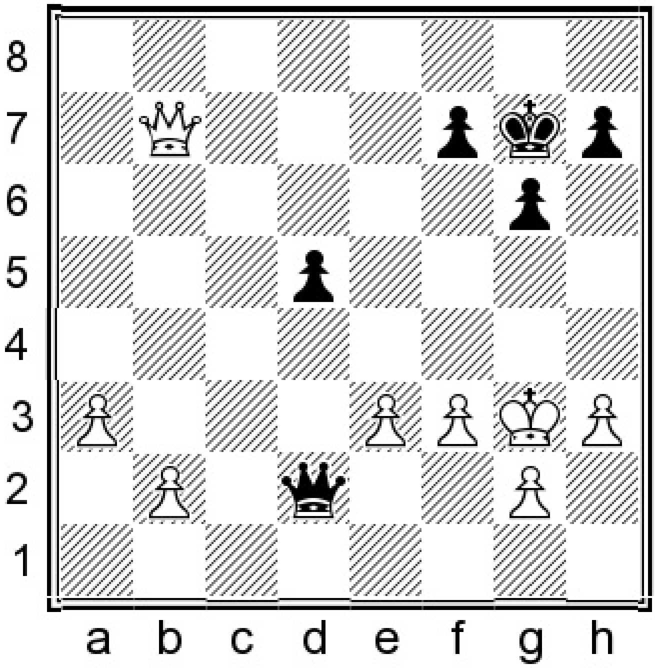
analysis diagram

Once again it is instructive to see the great difference in activity between the two queens.

30.♕c8+?! ♔g7 31.♕xb7?

It was still possible to get back on the right track with 31.♕c3+ ♔g8 32.♕d4+–.

31...♕d2+ 32.♔g3



Now Black can force perpetual check. Once again, it is worth noting the clues. The white queen is now distant and there are some negative geometrical circumstances around the white king.

32...d4! 33.exd4

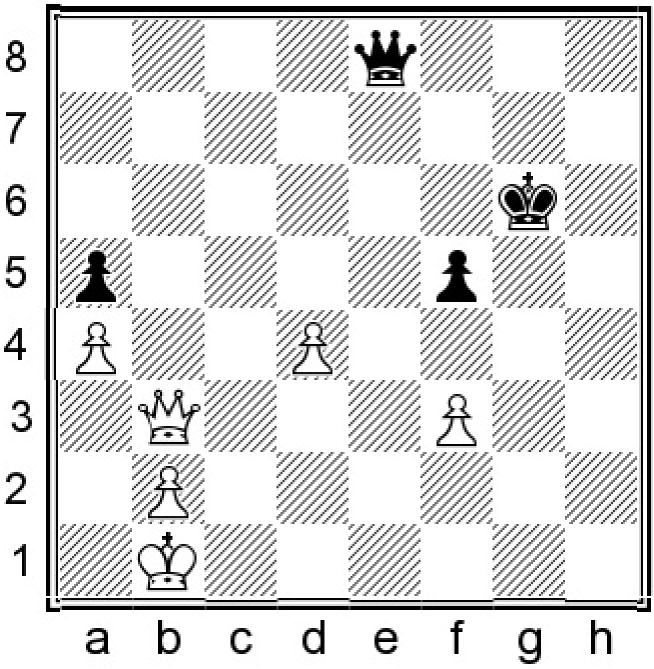
33.e4?! makes no sense, because it fails to prevent perpetual check and it gives Black the option to play for a win with his passed pawn with 33...d3!?.

33...♕g5+ ½-½

It is impossible to hide from the checks.

Until now we have been comparing the activity of the queens in positions with material equality. Centralising the queen can also be useful in the struggle against passed pawns.

Mark Taimanov
Paul Keres
Garga 1953 (training game)



White to move

67.♕b6+ ♔g5! 68.♕xa5

An advantage of three extra pawns ought to be sufficient to win, especially in a game between two of the best players in the world, but the position contains some technical difficulties, due to the activity of the black king, the weak pawn on f3 and in particular the centralised position that the black queen now adopts. The errors that White is about to commit are very interesting.

68...♕e2! 69.♕c3 f4 70.♔a2 ♔h4 71.d5 ♔g3

The black king has come to attack the f3-pawn and if this falls, Black will have a quite advanced passed pawn. The moment has arrived for White to choose his plan and although there must be more than one way to win, it seems there is only one convincing one:

72.♔a3?!

Instead of this, by centralising the queen, as well as by pushing the passed pawns, White could have frustrated all Black's activity and won easily, but this would have entailed giving up a pawn. The line runs 72.♕d4! ♔xf3 73.d6 ♕e6+ 74.b3 ♕d7 75.a5, and the a-pawn advances without opposition. White wins.

72...♕d1 73.♕b3 ♕d2!

A new step in the struggle for the domination of the key squares.

74.♔a2 ♕d4!

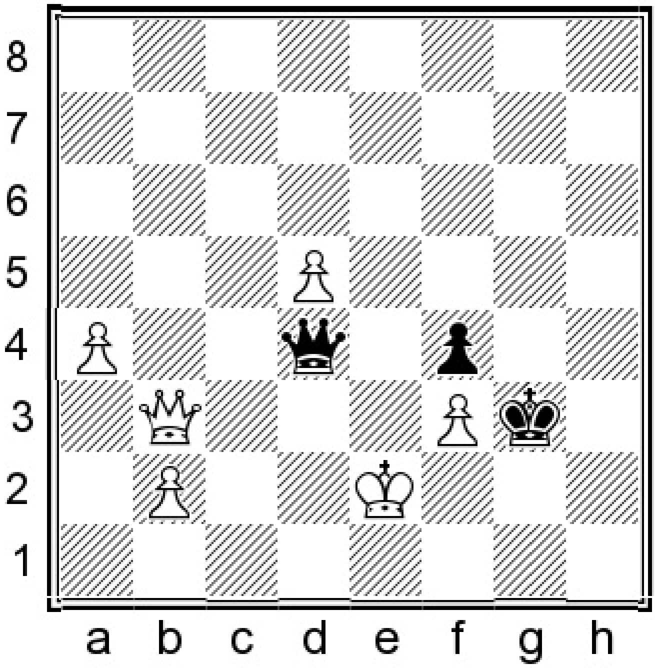
It can be seen that the black queen has taken up the best position, due to his opponent's natural concern to keep everything defended.

75.♔b1 ♕g1+ 76.♔c2 ♕c5+ 77.♔d2?!

This is the moment when White, with the help of tactics, could have dislodged the black queen from its active position by playing 77.♕c3!, since if 77...♕xd5?! the white queen starts a veritable symphony of checks before capturing the f4-pawn, while keeping everything defended: 78.♕e1+! ♔h3 79.♕h1+ ♔g3 80.♕g1+ ♔h3 81.♕g4++–.

77...♕d4+ 78.♔e2?

78.♔c2! ♕c5+ 79.♕c3.



78...♔g2!

Zugzwang!! 78...♕f2+ leads to another queen ending, but with fewer hopes for Black: 79.♔d3 ♕xf3+ 80.♔c4 ♕xb3+ 81.♔xb3 f3 82.d6 f2 83.d7 f1=♕ 84.d8=♕ ♕f7+ 85.♔a3+–.

79.a5

After this move, Black has perpetual check. It is interesting to see the difference if it were Black to play, since he has no useful move to maintain his position, e.g. 79.-- 79...♕f2+ 80.♔d1 ♕d4+ 81.♔c1 ♕e3+ 82.♔c2 ♕e2+ 83.♔b1 and the king is hidden.

79...♕f2+ 80.♔d1

Or 80.♔d3 ♕xf3+ 81.♔c4 ♕e4+! (this was not possible before) 82.♔c5 f3, and the f-pawn provides sufficient counterplay.

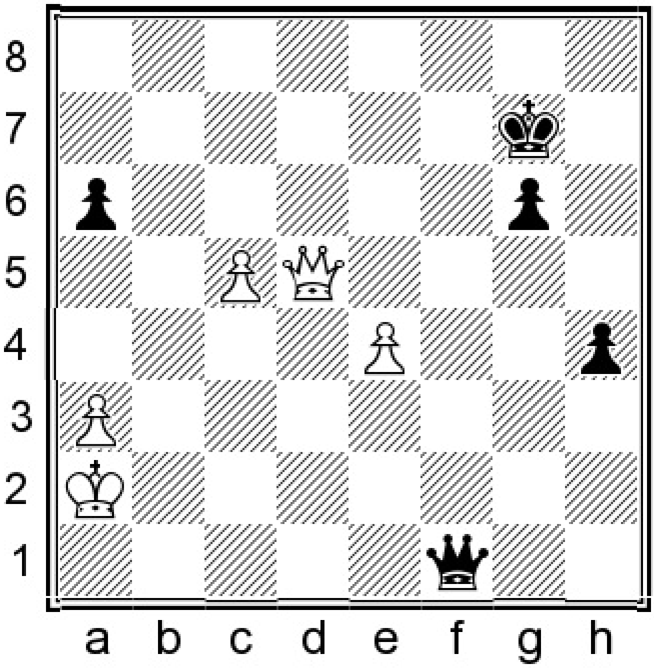
80...♕d4+ 81.♔c1 ♕e3+! 82.♔c2 ♕c5+? ½-½

After this erroneous move the players agreed a draw, which was perhaps a just reward for Keres's incredible defence when three pawns down. But the correct move to maintain the perpetual was 82...♕e2+ (or 82...♕f2+) 83.♔b1 ♕e1+, because if 84.♔a2 Black captures the pawn which has just advanced: 84...♕xa5+=.

On the other hand, after 82...♕c5+ White could once again give up part of his material advantage in order to win: 83.♕c3! ♕xd5 84.♕d2++–.

Better centralisation of the queen is an element that attracts more attention in positions without any passed pawns, but it can also be a fundamental factor when both sides are embroiled in a queening race. Here is a recent example.

Ian Nepomniachtchi 2784
Magnus Carlsen 2863
Legends of Chess Final 2020 (2.11)



Black to move

In a position like this, it would be unwise to think that you can be guided just by general ideas. Concrete calculation is essential, but by analysing the strongest lines we can discover that finding the best squares for the queen is a great help.

35...♕g2+?

It is natural to remove the queen from the edge, but in this case the factor of flexibility is important. From f1 the queen can go to f7 to block a check (due to the specific position of the white king on a2) and for that reason it was better to begin with the advance of the h-pawn: 35...h3! 36.c6 (36.♕d7+? ♕f7+!) 36...♕f2+! (36...♕g2+ 37.♔b3 h2 38.♕e5+ ♔h7 39.♕e7+) and now this square is much better than g2, as the variations show: 37.♔b3 h2 38.♕e5+ ♔h7 39.♕e7+ ♔h6, and the white queen has no checks.

35...♕g2+? 36.♔b3 ♕g3+ 37.♔a4

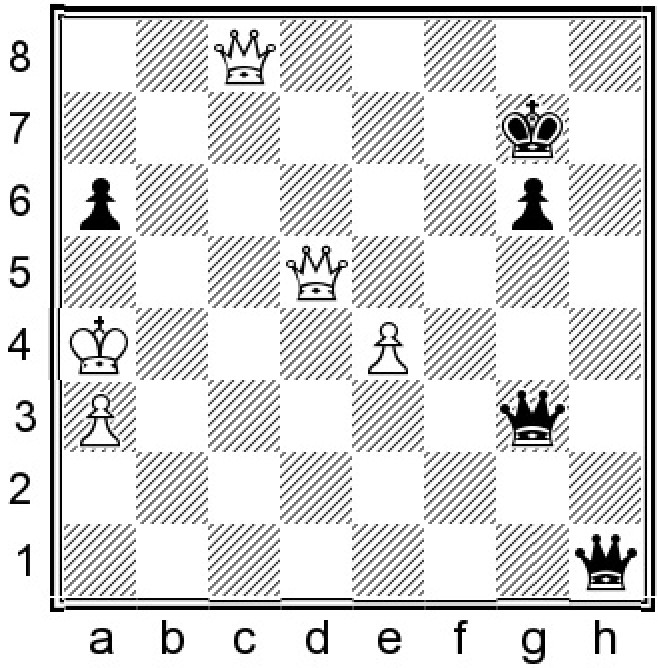
This is provisionally a better hiding place than a2. The white queen is better centralised and that compensates for the black pawn being one step ahead.

37...h3 38.c6?

38.♕d4+ – from this central position it is easier to reach the ideal squares:

A) 38...♔h7 39.♕d6! and Black will have to be satisfied with a draw;

B) 38...♔g8 39.♕d8+ ♔f7 40.c6 h2 41.c7 h1=♕? and although Black queens first, the better centralisation of the white queens wins: 42.♕d5+ ♔g7 43.c8=♕.



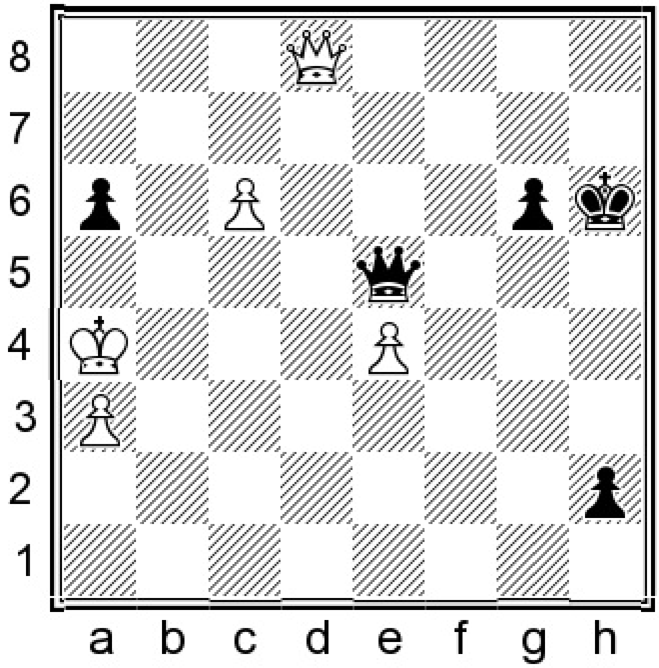
analysis diagram

The diagram is well worth seeing. Black has no valid checks and White will immediately begin his own decisive series of checks.

38...h2 39.♕d7+ ♔h6 40.♕d8

After 40.c7 h1=♕ 41.c8=♕ there is only a very slight difference from the diagram in the previous note (here the e4-pawn is not defended) but this does change the result as now Black has 41...♕xe4+, winning.

40...♕e5!



Wonderful centralisation. The black queen not only limits White's checks but also defends the h2-pawn and threatens mate.

41.♕h4+ ♔g7 42.♔b3 ♕b5+ 43.♔c3

43.♔a2 ♕e2+ 44.♔b3 ♕f3+ and queens.

43...♕xc6+ 44.♔d3 ♕d6+ 45.♔e2 ♕xa3 46.♔f2 ♕b2+ 47.♔g3 ♕f6 48.♕h3 ♕c3+ 0-1

Chapter 13
Queen vs rook

We all know that the queen is much superior to the rook, but there are two circumstances in which the contest is interesting and we shall deal with these in this short section: 1) when a fortress, or something that appears to be one, can be constructed, and 2) when the rook supports a dangerous passed pawn.

Pattern 94 Fortresses (in queen vs rook)

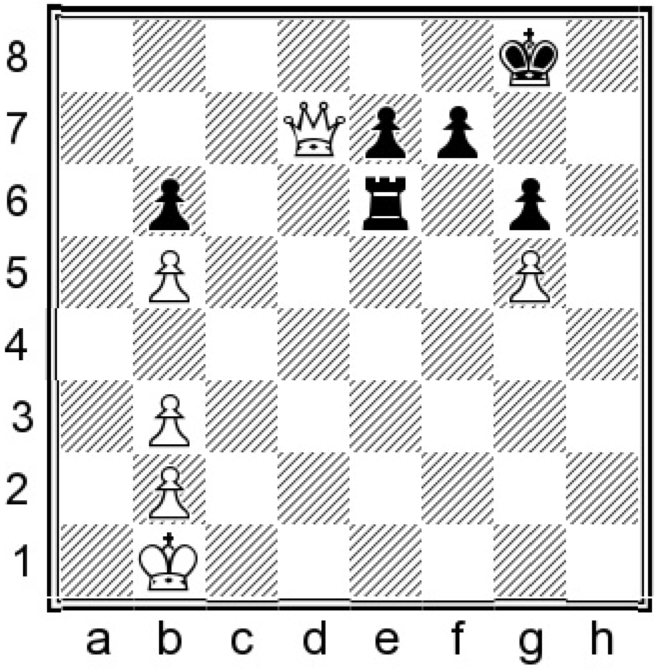
The *fortress* is a theme we have discussed in several sections of the book, as well as in the introduction. Of all the endings with one piece per side, queen vs rook is the one in which it plays the most important role. We recommend here a review of the classification given in the introduction.

In fortresses of queen vs rook it is essential for the rook to have a support point, or even better two, to be able to move freely between them and thus prevent zugzwang. It is also very desirable for one or more pawns to be on the second rank, so that the queen cannot infiltrate to the rear of the defender's position.

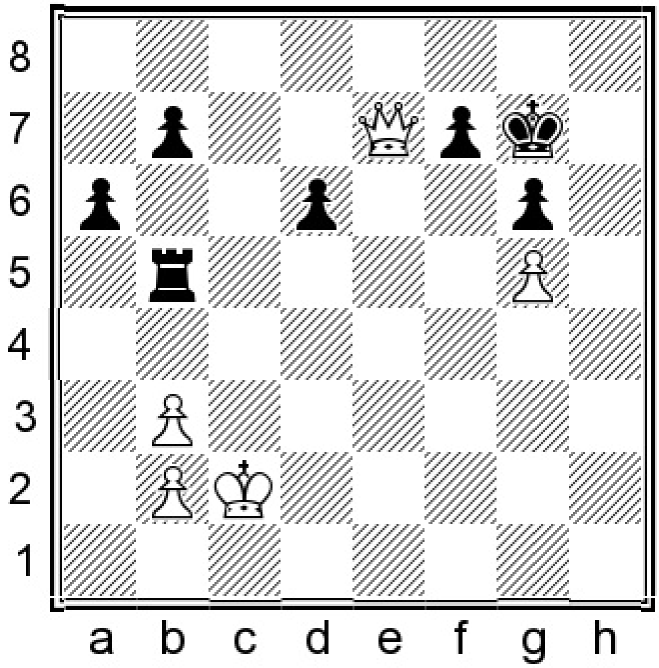
Most fortresses in queen vs rook endings occur with all the remaining pawns on the same wing, but in fact we shall begin with an example in which there are pawns all over the board.

We shall start with a case in which various fortresses could have been constructed.

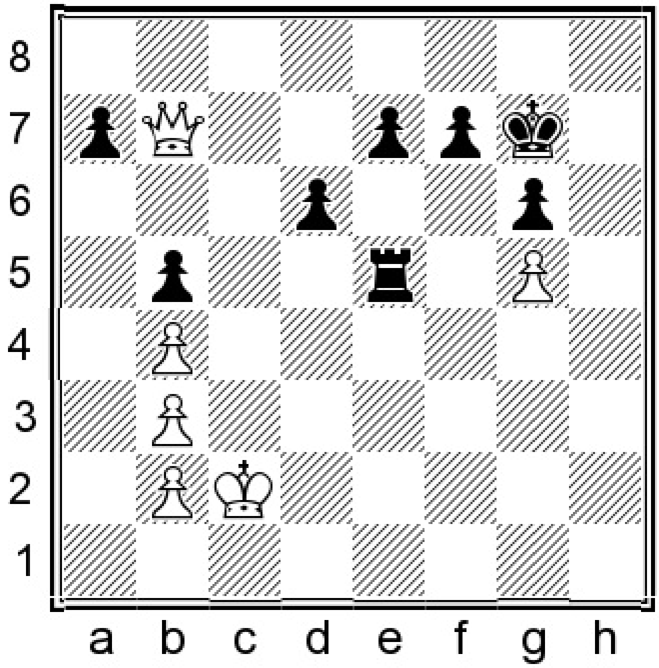
Series: Martin-Petursson



Position 1



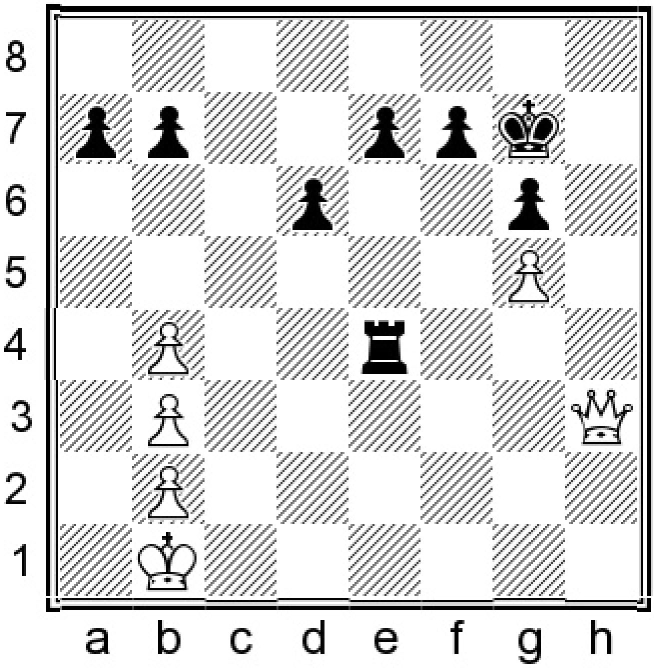
Position 2



Position 3

In the analysis of the next example we shall encounter these three possible fortresses. An interesting exercise is to try to guess which of these holds, and which can be demolished.

Angel Martin
Margeir Petursson
Biel izt 1985 (12)



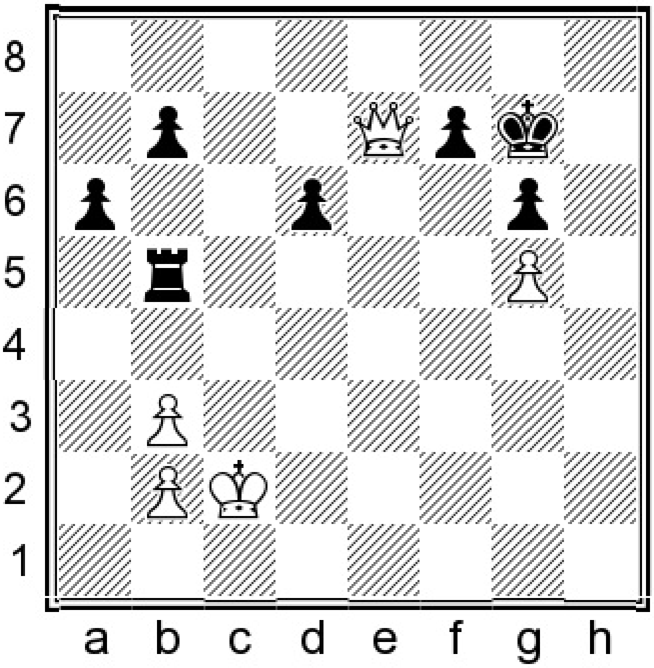
White to move

In the diagram position, there are some objective circumstances which allow Black to be thinking about a fortress: solid pawn cover around the black king and an absence of pawn breaks on that wing. Of course there are also some factors which allow White to trust that a fortress will be impossible to build, or will not be invulnerable, specifically the presence of pawns on the queenside. In fact, White can choose between three options, which will force Black to construct different fortresses in each case, and he must decide which of the three is the least solid.

32.♕f3?

It appears that White is ignoring the clues which can lead to the loss of the extra half-point so painstakingly gained in the middlegame. This move allows Black to construct the most solid fortress of the three.

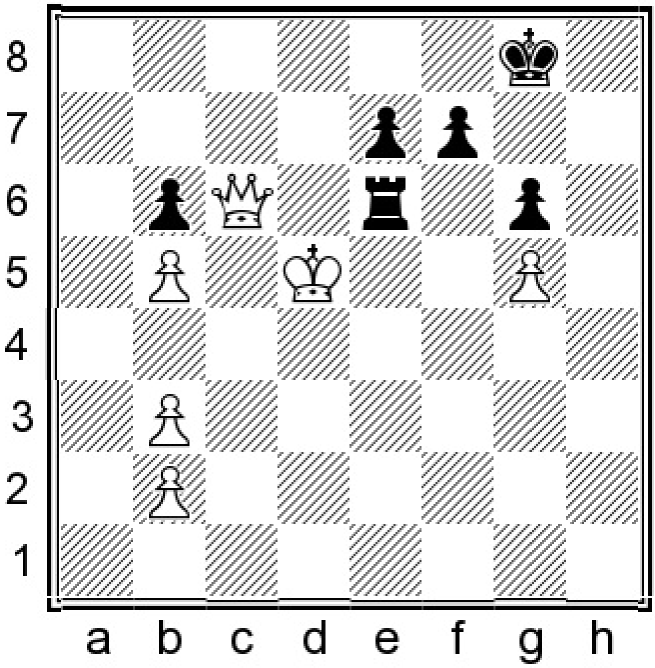
Another option was for the queen to penetrate immediately with 32.♕d7?!, in order to capture some pawns, but after 32...♖xb4 33.♔c2 a6 34.♕xe7 ♖b5



analysis diagram

we arrive at a fortress, with no pawn breaks, no zugzwang and no possible sacrifices. It should hold, although it appears more vulnerable than the one in the game.

The most logical continuation, which prevents the fortress on the fourth rank, is 32.b5!, to continue with ♕d7 or ♕c3, followed by ♕c7. At first this seems decisive, but here too Black can construct a strong fortress with 32...b6! (32...♖e6!? 33.♕c3+ ♖e5 34.b4 b6 perhaps leads to the same fortress as the main variation; on the other hand, 32...♖e5? allows 33.♕d7 ♖xg5 34.♕xb7, when White will create a passed pawn on the queenside and should win easily) 33.♕d7 ♖e6 34.♕xa7 d5! and the b6-pawn remains defended: 35.♕d7 d4 36.♕xd4+ ♔g8 37.♕d7, reaching the first position of the series. We are faced with a fortress, the solidity of which we do not know. Since there are no pawn breaks, White can only rely on zugzwang and the possible exchange of pieces on the c6-square. A possible variation is 37...♔g7 38.♕e8 ♖e1+ 39.♔c2 ♖e6 40.♔d3 ♖e1 41.♔d4 ♖e6 42.♕c6 ♔g8 43.♔d5, reaching what is perhaps the position of maximum progress for White, who is trying to win a pawn ending.



analysis diagram

The capture on e6 is a threat. 43...♖d6+! (the most tenacious; instead, 43...♔f8 leads to a lost pawn ending, due to the dominant position of the white king: 44.♕c8+! (the immediate capture is not sufficient) 44...♔g7 45.♕xe6 fxe6+ 46.♔xe6 ♔f8 47.♔d5 ♔f7 (47...e5 48.♔xe5 ♔e7 49.b4+–) and now the queening race is not winning for White, but he can win using zugzwang, thanks to the reserve tempi: 48.b4! ♔g7 49.♔c6 e5 (49...e6?! 50.♔xb6 and the king stops the pawn) 50.♔d5!, heading back and winning) 44.♔e5 (44.♕xd6 does not win) 44...♔g7 45.♕c8 (a new zugzwang; Black has to weaken his position) 45...f6+ (45...♖d3 46.♕c7 and Black loses an important pawn) 46.gxf6+ ♖xf6 47.♕e8 and the fortress falls.

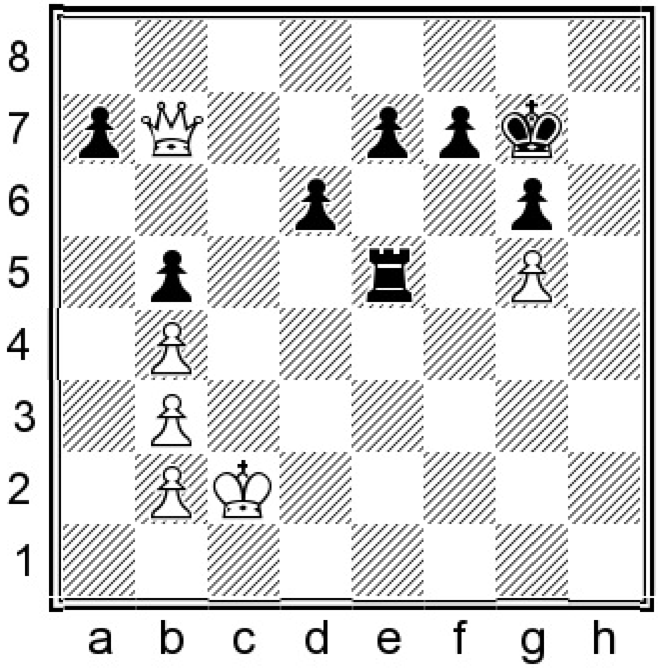
32.♕f3? ♖e1+!

Black immediately seizes his opportunity.

33.♔c2 b5!

This advance leads to the two circumstances that the black fortress requires: no pawn breaks on the kingside and no entry for the white king. Despite the great material advantage and the analysis engine’s insistence on asserting an advantage at a high evaluation level for White, the position is a draw.

34.♕b7 ♖e5



The rook defends everything, except the expendable pawn on a7, and as there is neither an entry for the king nor a zugzwang, the position should be a draw, although White keeps playing.

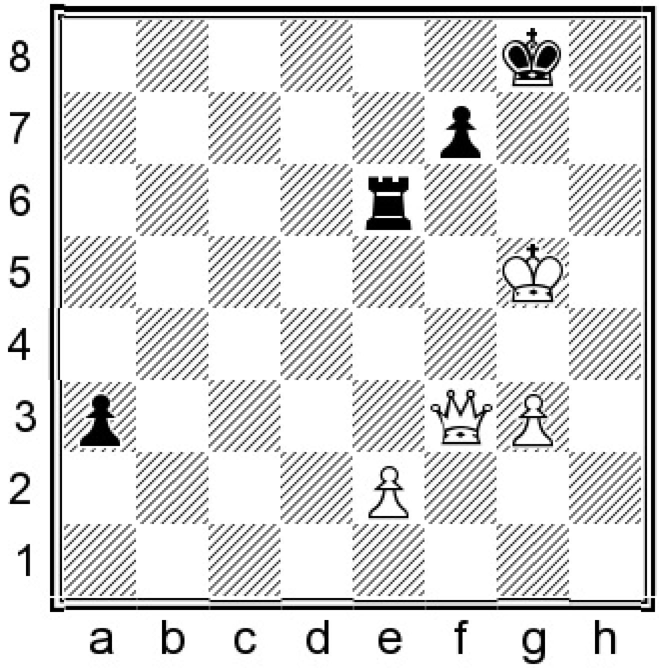
35.♕xa7 ♔f8 36.♕b8+ ♔g7 37.♕c7 ♔f8 38.♕d8+ ♔g7 39.♕e8

White has managed to force an interesting zugzwang. Now Black is unable to keep all his three pawns at b5, e7 and f7 defended. Fortunately he can switch to another fortress by giving up his two centre pawns in return for White's pawn on g5:

39...♖xg5 40.♕xe7 ♖f5 41.♕xd6 ♔g8 42.♔d3 ½-½

As we see in the following example, a knowledge of theoretical fortresses can be useful, to get one's bearings in positions which are in the phase of building a fortress.

Utut Adianto 2485
Viktor Kortchnoi 2585
Manila 1992 (11)



White to move

This position is close to the well-known fortress with a pawn on f7 vs a pawn on g2. Black is aiming for this, but White can prevent it. The passed a-pawn can temporarily divert the white queen but White should only be concerned about preserving his e-pawn.

43.♕xa3?

This allows Black to reach the theoretical fortress, and it probably means that Adianto didn't know it.

43.♔f5! is the simplest, e.g. 43...a2 (43...♔g7 44.♕c3+ ♔g8 45.e4 a2 46.♕a3+–) 44.♕a8+ ♔g7 45.♕xa2 and White preserves both pawns, although the g-pawn is not needed.

43.♕xa3? ♖xe2 44.♕c3 ♖e6!

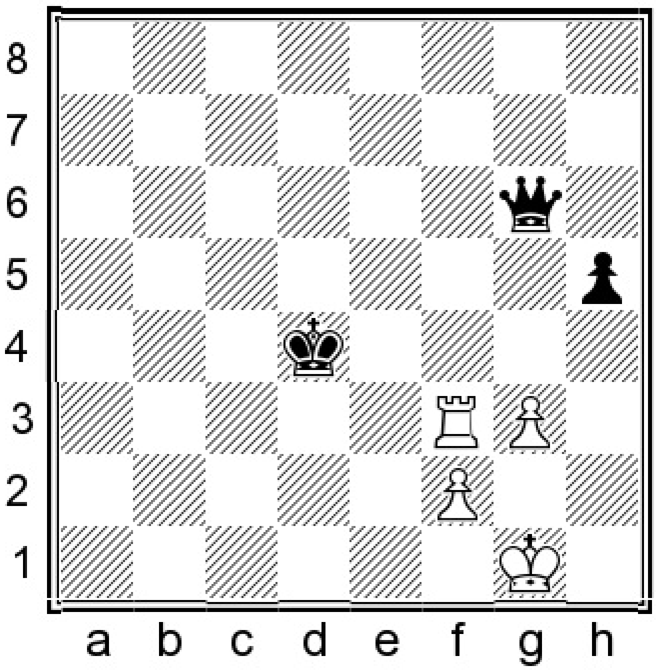
The rook can oscillate between e6 and g6 and there are no pawn breaks or king entries.

45.♔f5 ♔h7 46.♕d4 ♖g6 47.♕d8 ♔g7 48.g4 ♖h6 49.g5 ♖g6 50.♕d4+ ♔g8 51.♔e4 ♖e6+ 52.♔f5 ♔h7 ½-½

With the arrival of tablebases, first the Nalimov and then the Lomonosov, our knowledge of fortresses has taken a step forward, but there will be further advances as positions with more pieces start to be analysed. A very common group of fortresses are the ones with two pawns vs one and three vs two, all on the same wing. Two pawns vs one means it is a seven-piece ending and these have already all been classified, but three vs two still hides some theoretical secrets. We are going to analyse a game in which one of the positions which is now perfectly analysed arose.

Maxim Dlugy 2570

Alexander Ivanov 2470
Chicago 1989 (6)



White to move

The large number of mistakes committed in this ending highlights the fact that handling an unfamiliar fortress well is no trivial matter. Rather than providing a classification to indicate which cases are won and which are drawn, we shall try to explain it in relation to the resources of the stronger side and their possible neutralisation. We shall begin with a list of these resources. Since a winning pawn ending is not possible, we have to rule out exchanging the queen for the rook. That leaves us with:

- bringing the king to the e2-square;
- zugzwang by putting the queen on f1;
- the pawn break ...h5-h4.

So, there are only a few things to attend to, and yet it is still very difficult.

75.♔h2?

White should begin by consolidating the position of his rook, since on f3 it is a tactical weakness. Perhaps he was not sure whether to place it on e3 or f4. But in this case, the position of the rook on e3 is completely secure, because the pawn break ...h5-h4 is not to be feared, the black king is unable to create any threats and White can always guard the f1-square with his king, because the rook can move safely, normally to e7.

A) 75.♖e3! was therefore the correct move, although White might have feared two things: 75...♕b1+ (or 75...h4 76.g4!, leading to a well-known fortress) 76.♔g2 ♕d1 when White cannot allow 77...♕f1 but plays 77.♖e7!;

B) 75.♖f4+? leads to a vulnerable fortress: 75...♔d3 76.♖h4 (it is too late for 76.♖f3+ ♔d2 77.♖e3, because the pawn break 77...h4! is stronger now: 78.g4 ♕xg4+ 79.♔h2 ♔d1 80.♔h1 h3 81.♖g3 ♕h5 82.♔h2 ♔e2–+) 76...♔e2, threatening 77...♕b1+ and 78...♕f1.

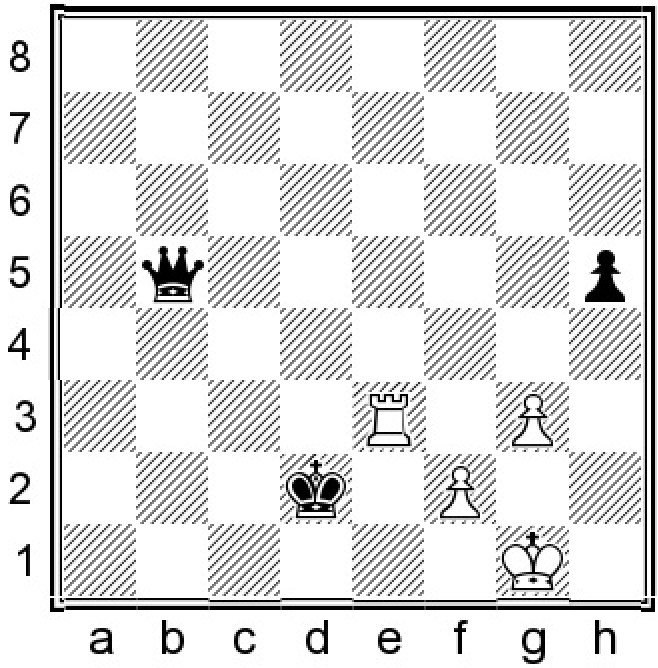
75.♔h2? ♕b1! 76.♖f8

76.♖e3 ♕f1–+; 76.g4!? doesn't work now, because the black queen can move to f1: 76...hxg4 77.♖g3 ♕f1!.

76...♕b5 77.♔g1 ♔d3?

Advancing the king is logical but premature. 77...♕c6 78.♖f7 ♕c1+ 79.♔g2 (79.♔h2 ♔d3 80.♖f3+ ♔e2) 79...♕g5, and the white rook cannot prevent the black king from crossing the third rank, because if 80.♖f3? (if 80.♖f4+ ♔d3 and now White is unable to move his rook to the third rank and at the same time remove the king from the pin, e.g. 81.♖f3+ ♔d2 82.♖e3 h4 83.g4 ♕xg4+ 84.♔h2 ♔d1–+) 80...♕d5, immediately winning the rook.

78.♖f3+! ♔d2 79.♖e3!

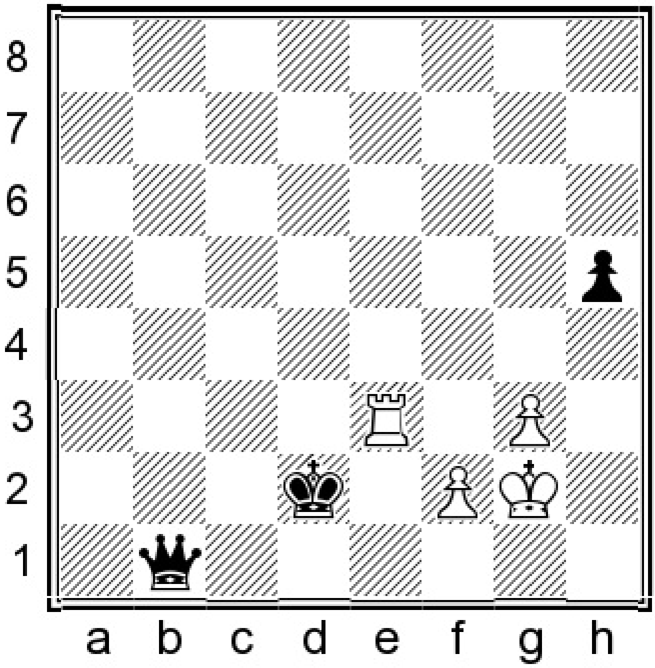


Now White has a perfect fortress, because he will always be able to prevent ...h5-h4.

79...♕b1+ 80.♔g2 ♕b7+ 81.♔g1 ♕g7 82.♔h2! ♕g4 83.♔h1!

This is the only move, but one that is easy to understand, since it is a matter of being able to respond to 83...h4 with the capture of the pawn.

83...♕h3+ 84.♔g1 ♕c8 85.♔g2 ♕c4 86.♔g1! ♕c1+ 87.♔g2! ♕b1



We should recognize Dlugy’s efforts as very praiseworthy. Here he must have felt that his work was nearly finished. For a human it is impossible to guess that there is only one saving move:

88.♖e8?

88.♖e7!! prevents both queen checks, and Black can make no progress.

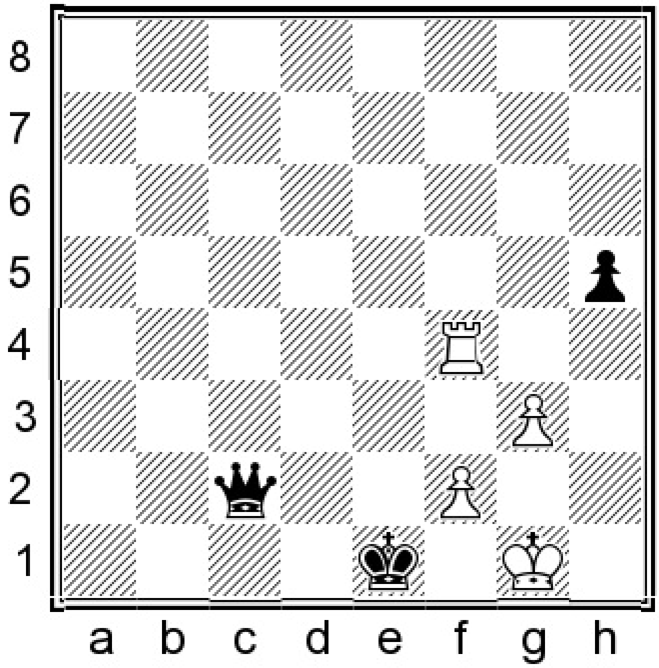
88...♕b7+ 89.♔g1 ♕g7?

It was necessary to play the immediate 89...h4!.

90.♖e4?

Here 90.♔f1!, once again preventing 90...h4, would have rebuilt the fortress.

90...♕g6 91.♖b4 ♔e2 92.♖b2+ ♔e1 93.♖b4 ♕c2 94.♖f4



And just when Black has made the greatest progress he now makes the stupidest mistake:

94...h4?

This looks like a brilliant stroke, but in fact it is a stupid mistake, especially when he could have played the simple 94...♔e2 95.♔g2 ♕b1! and now 96...♕f1 cannot be prevented.

95.♖f3?

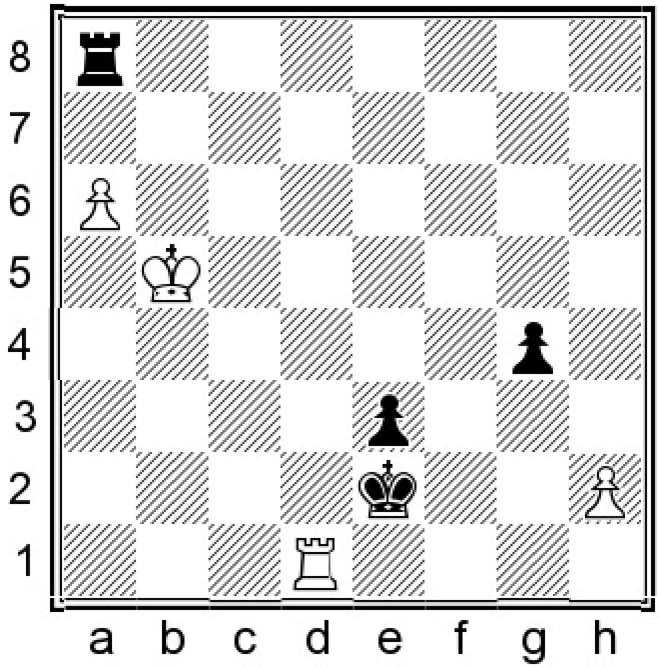
But White is exhausted and fails to discover the saving resource. It was possible to allow the capture on f2 with check: 95.♖xh4 ♕xf2+ 96.♔h1 and, since the black queen will never be able to capture the g3-pawn due to the *crazy rook* theme, White will be able to transpose to the rook + knight's pawn fortress: 96...♕xg3 97.♖e4+ ♔f1 98.♖f4+! ♔e2 99.♖f2+ ♔e3 100.♖e2+=.

95...h3 96.♔h2 ♕c6 0-1

Pattern 95 Far advanced passed pawns

The second circumstance in which a rook can resist against a queen (or even win!) is when it is accompanied by very advanced passed pawns (these must usually be on the seventh or at least the sixth rank). The main thing is that the passed pawn(s) cannot be blocked by the enemy king and so the queen is forced to take up a passive position.

Adam Kuligowski 2450
Yehuda Gruenfeld 2500
New York 1981 (5)



White to move

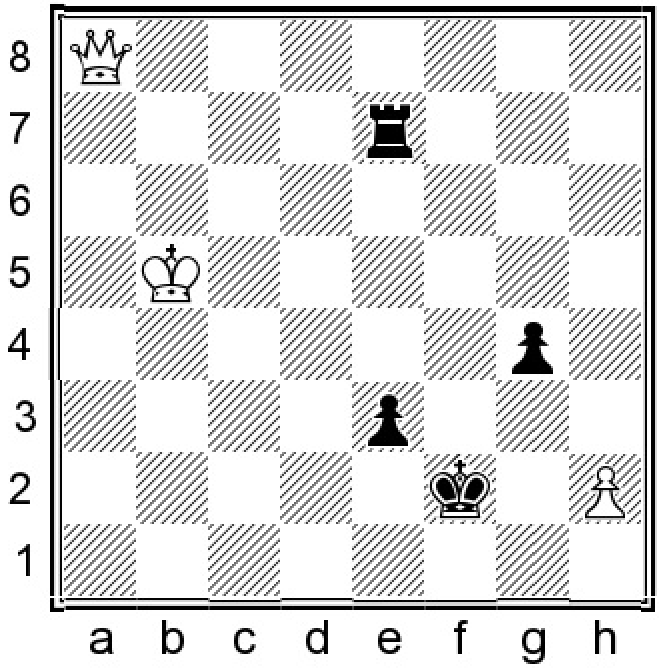
73.♖d7?

A bad division of labour. The rook’s task should be to give itself up for the two black pawns, leaving the king to support the a-pawn and force the exchange of Black’s rook: 73.♖g1! ♔f3 74.♖f1+ ♔g2 75.♖f4 e2 76.♖xg4+ ♔f3 77.♖g1=.

73.♖d7? ♖e8!

In contrast, Black shares out the tasks appropriately: the rook supports the promotion of its pawn and Black will allow the opponent’s pawn to queen, in exchange for capturing White’s rook.

74.a7 ♔f2 75.♖e7 ♖xe7 76.a8=♕



With a queen on the board, White probably felt secure, and with his threat of 77.♕f8+ he perhaps even harboured some hopes of winning, but he will soon receive a rude awakening.

76...♖e5+!

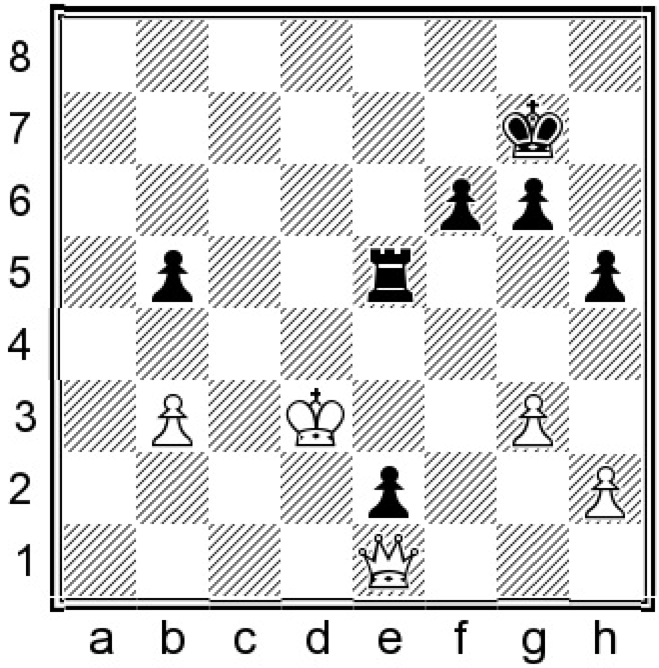
A very important move, with check.

77.♔c4 e2

Now there is no way to stop the pawn and the checks run out very soon.

78.♕a7+ ♖e3 0-1

Aleksander Wojtkiewicz 2460
Marek Hawelko 2455
Poland tt 1989



Black to move

Here we encounter an interesting position of this pattern. The queen has to blockade the pawn on the seventh rank and a draw is the most that White can hope for. But Black can create another passed pawn, which will advance and bring about a desperate situation for the white pieces. However, there is even another interesting aspect here: the white king is nearby and if it could exchange places with the blockading queen the result would be the opposite. Finally, Black has some difficulty in creating the second passed pawn, while at the same time keeping his own king safe from checks. If the checks begin, this could lead to one of the following three scenarios:

1) the checks run out and Black wins;

2) the checks do not run out and it is perpetual check;

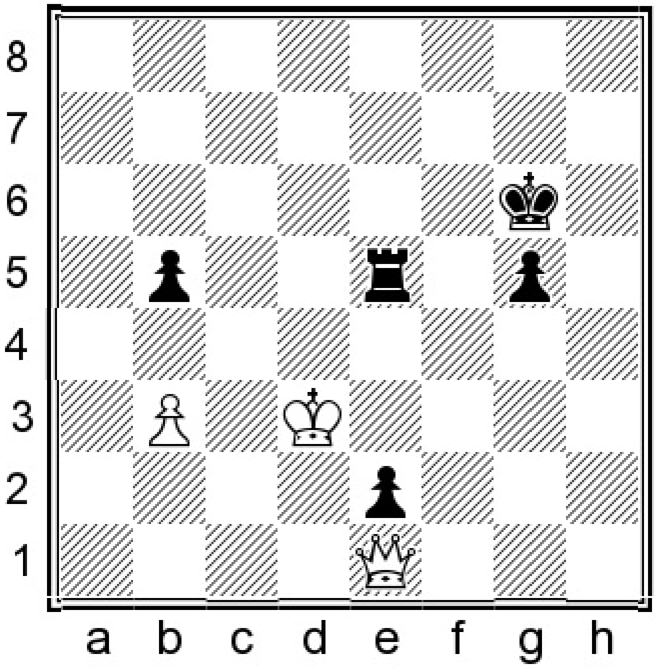
3) by giving checks, the queen swaps places with the king and with the change of blockader White wins.

42...g5!

This is the right advance, as 42...f5?! allows 43.h4! and here it is going to be difficult to create another passed pawn without being subjected to annoying checks, e.g. 43...g5!? 44.hxg5 ♔g6 45.♔d4 ♖e4+ 46.♔d3 ♔xg5 47.♔d2 ♔g4 48.♔d3 ♖e8 49.♔d2 h4 (this pawn break is the only way to make progress) 50.gxh4 ♔h5! (now the f-pawn is threatening to advance to f2 and destroy the blockade, but there are some difficulties) 51.♔d3 f4 52.♔d4 ♔g4 (52...f3? 53.♕g3!; the queen emerges from its confinement with threats and Black is very close to defeat: 53...♖d8+ 54.♔c5 ♔h6!? 55.h5!+–) 53.♔d3 f3 54.♕g1+ ♔xh4 55.♕f2+ ♔g4 56.♕g1+ ♔f5 57.♕c5+ ♖e5 58.♕f8+=. This variation is not exhaustive, but is certainly sufficient grounds for 42...g5 to be preferred.

42...g5! 43.h3?!

Although there is no solution, this move allows Black to carry out his plan in a simple manner. White should have hindered ...f6-f5, for example with 43.♔d4!? ♔g6!? (43...b4?! weakens the b-pawn and grants White some new resources: 44.♔d3 f5 45.♔d4 ♔f6 46.♔c4 f4 47.gxf4 gxf4 48.♔xb4 f3 49.♔c3 ♔e6 50.♔d2 ♖d5+ 51.♔c2 ♖e5 52.♔d2=; 43...♔f7 44.h3 ♔e6 45.g4 hxg4 46.hxg4 f5 leads to the same position) 44.h3 (44.♕b1+ leads nowhere: 44...♔f7 45.♕e1 ♔e6!–+, followed by 46...f5) 44...♔f5 45.♔d3 ♔e6!? (there is no alternative to allowing 46.g4) 46.g4! hxg4 47.hxg4 f5 (sooner or later this had to be played) 48.gxf5+ ♔xf5 49.♕f2+ ♔g6! (better than 49...♔e6 50.♕b6+ ♔f7? 51.♕b7+ ♔g6 52.♕c6+ and White has perpetual check) 50.♕e1



analysis diagram

50...♔f7! 51.♕f2+ (51.♔d2 ♔e6–+) 51...♔e8 52.♕e1 ♔e7 53.♔c2 ♔e6 54.♔d2 g4 55.b4 ♔d6 (55...g3? 56.♕xg3! and the pawn ending is a draw) 56.♔c2 g3 57.♔d2 g2–+.

43...f5! 44.♔d4

44.♔d2 ♔f7 (44...f4?? is an example of a line in which the blockader is changed: 45.gxf4 gxf4 46.♕g1+ ♔f7 47.♔e1! and White wins) 45.♔d3 f4 46.gxf4 gxf4 47.♔d2 f3 48.h4 ♔e7–+. White has no checks, and if he moves the king, ...f3-f2 follows.

44...♔f6! 45.g4 hxg4 46.h4 ♖e4+ 47.♔d5 ♔g6 48.h5+ ♔xh5 49.♕h1+ ♔g6 0-1

Chapter 14
Queen vs two pieces

The battle of queen vs a rook + minor piece occurs relatively frequently; queen vs two minor pieces is much less common.

In many cases, the side that loses the queen does so voluntarily, trying to construct a fortress, or at least a position offering strong resistance. There are even a few opening variations based on sacrifices of that type, although the majority of these have fallen into disuse due to their results in master practice of the last few years. It is curious that Vasily Ivanchuk should have defended several of these lines, probably as a live research exercise.

There are two typical and interesting situations in the struggle of rook + piece vs queen:

1) a fortress, and

2) a passed pawn for the side with the pieces.

In the first case, the weaker side can normally only aspire to a draw, but if the pieces have good support points, and if in addition the side with the queen has weaknesses, that can spell danger; in the second case it is normal for the side with the passed pawn to be trying to win.

Whether the piece accompanying the rook is a knight or a bishop makes little difference conceptually, but the bishop is almost always stronger, especially if there is a passed pawn.

In this chapter we shall also include the struggle of queen vs two bishops, because it is quite rare and the important themes are the same.

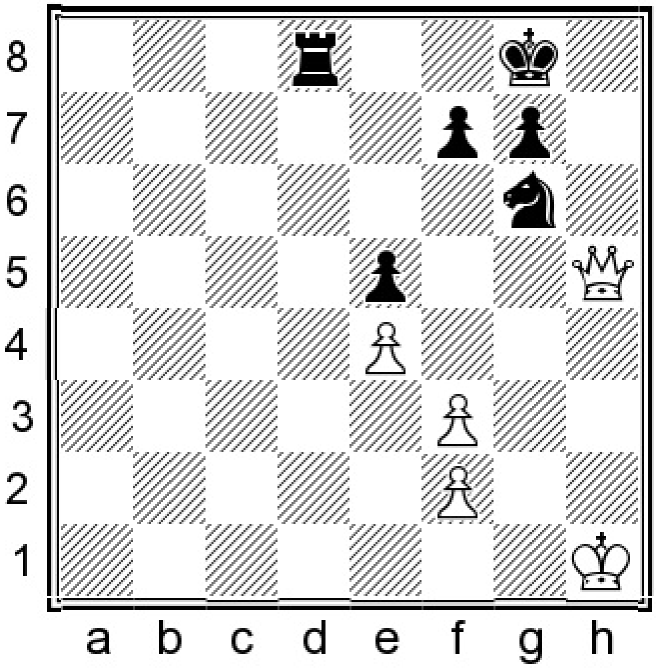
Pattern 96 Queen vs two pieces – the fortress

Since the rook is able to create secure fortresses when all the material is reduced to one wing, it is logical to think that the creation of a fortress for rook + piece should be much easier and, with the material confined to one wing, almost always successful.

It is another question when the fortress extends over both wings. Here the queen has many resources and if the fortress is not completely secure the queen can usually break it down.

In the first position we have a typical fortress situation with all the material on one wing.

Pavel Eljanov 2571
Aleksej Aleksandrov 2633
Moscow 2003 (3)



White to move

In such cases, the queen side has few possibilities of playing for a win. Furthermore the position of the white pawns is very rigid, and Black has an important outpost on f4. The conclusion is that White should play carefully and try to draw.

39.♕g5?!

Now White will gradually get into difficulties.

A) 39.f4!? would have been a prudent decision, forcibly eliminating f4 as an outpost for the knight, but as it involves the investment of a pawn, it is a difficult decision for a human player to make: 39...exf4 (39...♘xf4?! 40.♕xe5 ♘e6 41.f4 and the knight lacks a good support point) 40.♕b5 ♘f8! 41.♕f5 ♘e6 and White can do nothing, while Black can perhaps make some progress;

B) 39.♕f5!, keeping the e5-pawn under attack and seeking counterplay if the rook leaves the back rank, seems to keep the draw in hand. If 39...♖e8, intending to play ...♘f4, then 40.♕d7 ♖e7 41.♕c8+ ♔h7 42.♕h3+=.

39.♕g5?! ♖d3

39...♖e8!? would have guaranteed the position of the knight on f4 and built up Black's hopes more slowly, but undisturbed.

40.♕g4?!

White suspects nothing and plays meekly.

40...♖c3 41.♔h2 ♘f4 42.♕d7 f6 43.♔g3 ♔h7 44.♕f5+ ♔h6 45.♕d7 ♖c1

The black position is solid and well-coordinated and White should think seriously about a draw.

46.♔h2 ♖f1 47.♕d2?!

47.♕a7!, keeping the g7-pawn under attack and the f2-pawn defended, ensured the draw.

47...♔h5!

Black launches his king into the attack. The white position is difficult, although right now he has a saving resource:

48.♕a2?

The decisive mistake, although White is going to fight on for a while. 48.♕e3! was a very effective resource to achieve a draw, but it was difficult to see: 48...♔h4 49.♕e1!!=.

48...♔h4 49.♕a7 ♘h3

White is losing at least the f2-pawn.

50.♕xg7 ♖xf2+ 51.♔h1 ♖xf3 52.♕g8?!

Although the white position is lost, 52.♕c7!? would have set a diabolical trap and was worth trying: 52...♔g3? (this allows the *crazy queen* resource; 52...♘g5 is one of the correct continuations, e.g. 53.♔g2 ♖f4 54.♕a7 ♘xe4 and Black wins, as confirmed by the Lomonosov tablebases) 53.♕xe5+!=.

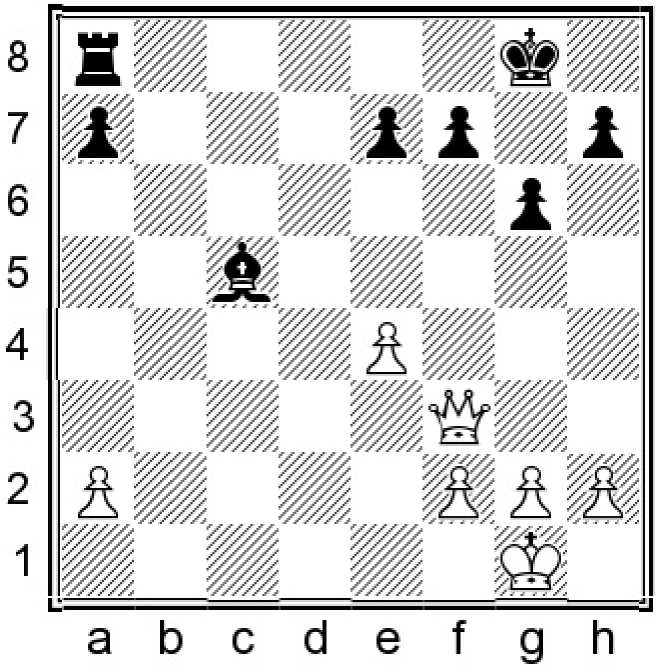
52...♖f1+ 53.♔h2 ♖f2+ 54.♔h1 ♘g5! 55.♕c4?!

Although this hastens the end, the white position was very precarious and in practice untenable. 55.♔g1 ♔g3 56.♕g6 ♖f4 57.♕g8 ♖xe4 also leads to a lost position.

55...♘f3 56.♕a2 ♖h2+ 0-1

Now we shall see a position from one of the theoretical variations that leads to an ending. It has occurred several times but cannot be recommended for Black. It arises from the Grünfeld Indian Defence.

Vladimir Kramnik 2751
Alexei Shirov 2726
Hoogovens 1999 (6)



White to move

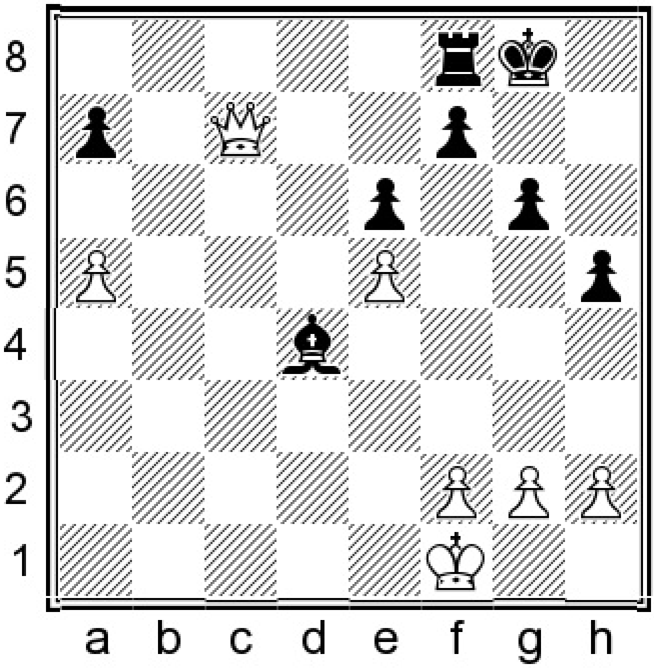
Black’s position is very solid. It is close to being a fortress, but on the queenside it cannot be completely stabilised, and this is the source of all Black’s problems.

19.♕c3!

First White compels the bishop to make a decision.

19...♖c8N

19...♗b6 was the choice of Kasparov, who was also unable to hold this position: 20.♔f1 ♖d8 21.a4! (threatening 22.a5, after which Black’s queenside position would cease to be invulnerable) 21...e6 22.a5 ♗d4 23.♕c7 ♖f8 24.e5! (once again preventing the bishop from becoming strong thanks to the support of its pawn on e5) 24...h5.



Now 25.♕d6! ♗a1 26.a6 ♔g7 27.♕c5, capturing the a7-pawn, would have been very conclusive.

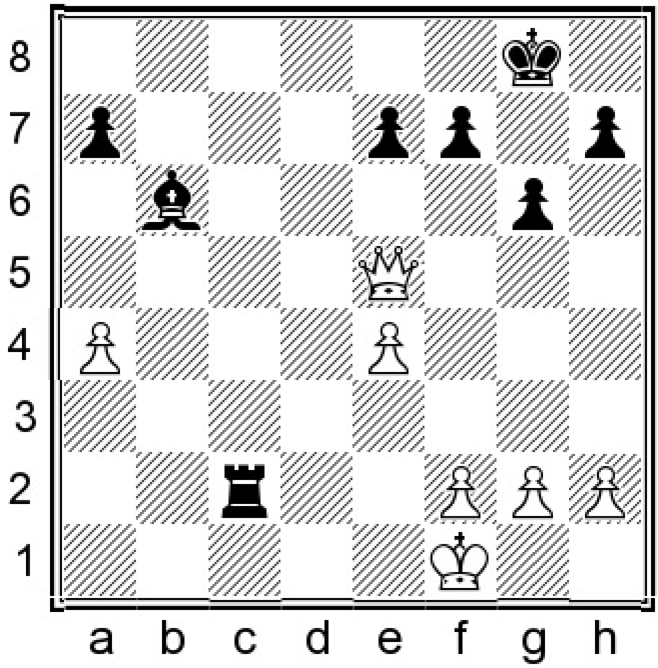
19...♖d8 20.♔f1 ♗d4 21.♕c7 ♗b6 22.♕xe7 ♖d2 was the active defence used successfully by Ivanchuk, but it is clear that he does not trust the fortress.

20.♔f1 ♖c7 21.a4 ♗b6

The bishop maintains the defence of the a7-pawn, but it will soon be harassed by the a-pawn. If 21...♗d6 22.♕a5! f6 23.h4 ♔g7 24.g3 h5 25.f4, and it is not possible for Black to face the threat of 26.e5 with any confidence.

22.♕e5! ♖c2

22...♖c1+ wins a pawn but after 23.♔e2 ♖c2+ 24.♔d3 ♖xf2 25.a5 the bishop has no moves, so that Black will be reduced to trying to construct a fortress of rook vs queen with pawns on only one wing.



23.a5!

All the tactics work for White and the bishop loses its support point. The rest of the game is much simpler for White.

23...♗c5

23...♗xf2? fails to 24.♕b8+ ♔g7 25.♕b3+–; 23...♗c7? loses to 24.♕xe7+– ♗xa5 25.♕e8+ ♔g7 26.♕e5+–; and 23...♖xf2+!? limits Black to seeking a fortress of rook vs queen: 24.♔e1 ♖xg2! 25.axb6 axb6 26.♕xe7 and White should win, if we consider that Black cannot capture on h2 and his rook still has no secure support point.

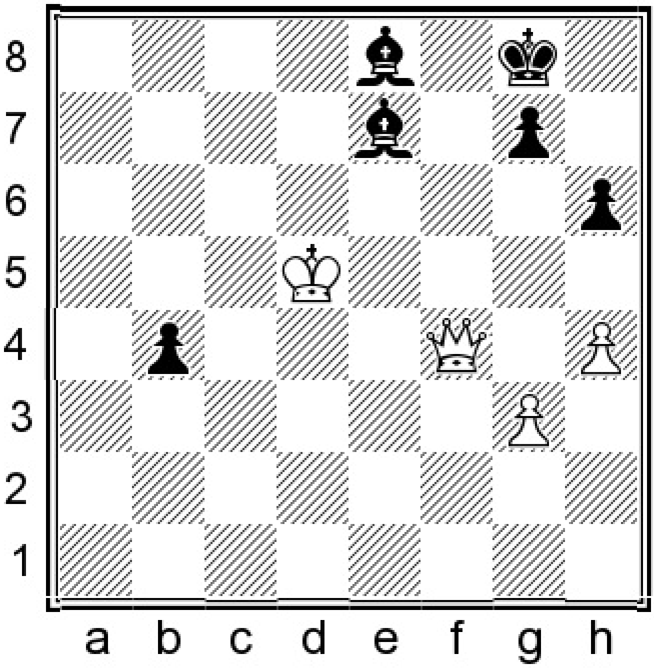
24.f4 e6 25.g4!

White launches an attack with his pawns, while the two black pieces have found no safe anchorage.

25...♖c4 26.♕c7! h6 27.f5! gxf5 28.gxf5 exf5 29.exf5 f6 30.♕g3+ ♔f8 31.♕g6 ♗d4 32.♕xh6+ ♔e7 33.♕f4 ♔d7 34.h4 ♖a4 35.♕e4 ♔d6 36.h5 ♖a1+ 37.♔e2 ♗e5 38.♕b4+ ♔d5 39.♕b7+ ♔c4 40.h6 ♖a2+ 41.♔f3 1-0

Although this is seen much more rarely, the bishop pair can also construct robust fortresses.

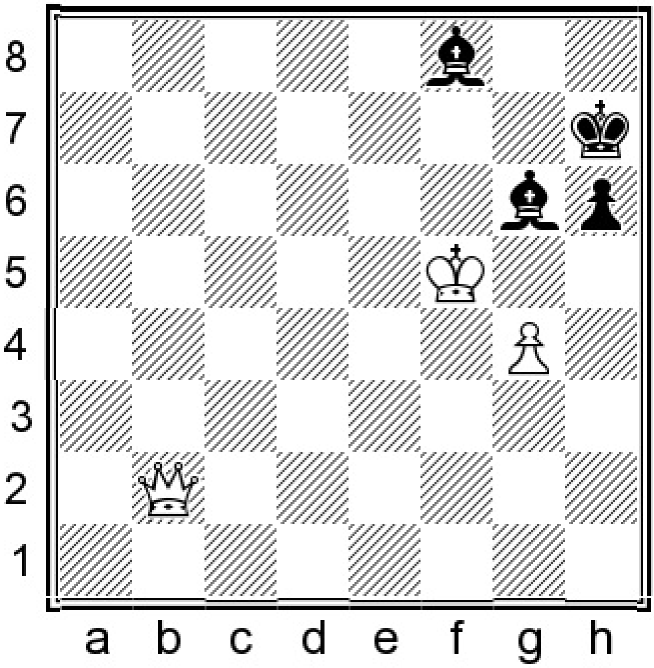
Bent Larsen
Lajos Portisch
Porec 1968 (m/8)



White to move

53.♕b8

53.♔e6! is a more unpleasant try and Black needs to defend agonisingly with a series of forced moves: 53...♗f8 54.g4 b3! (54...h5? 55.gxh5 b3 56.♕b8 ♗xh5 57.♔f5 b2 58.♔g5 ♗f7 59.h5 followed by ♕b2, and White wins) 55.h5! b2! 56.♕b8 ♗f7+! 57.♔f5 ♔h7! 58.♕xb2 g6+ 59.hxg6+ ♗xg6+...



analysis diagram

leads to a secure fortress.

53.♕b8 ♔f7 54.♕b7 ♔f8 55.♔e5 h5!

Probably this move consolidates the fortress permanently.

56.♕b8 ♔f7 57.♕b7 ♔f8 58.♕b8 ♔f7 59.♕c8 b3!

Now this pawn is unnecessary; it is more important to improve the position of the bishops.

60.♕c4+ ♔f8 61.♕xb3 ♗d7! 62.♕f3+ ♗f6+ 63.♔d6 ♗g4

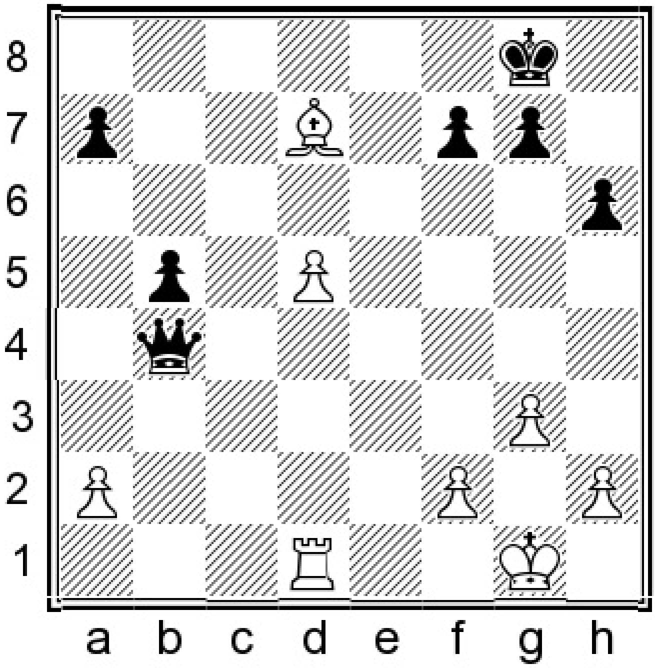
Draw.

With both bishops defended by pawns, all winning attempts are futile.

Pattern 97 Passed pawn

When the rook supports a passed pawn from behind, the two pieces can overcome the queen, but this happens more frequently when the minor piece is a bishop.

Vladimir Kramnik 2765
Viswanathan Anand 2735
Las Palmas 1996 (6)



White to move

29.d6!

Of course it is essential to prevent the queen from first blocking the pawn (in this case on d6) and then being replaced by the king; in that case the result might well be the reverse.

29...♕a4

Black follows his normal plan of attacking the white pieces, to hinder their coordination. It is more awkward for Black to try to blockade, for instance with

29...♕a5 30.♗c6 ♔h7 31.d7 ♕d8 and it is usually quite easy to lift the blockade of the pawn on the seventh rank, e.g. 32.♖e1 ♕c7 33.♖e8+–.

30.♖d3?!

Although this has the ingenious idea of defending the rook with the bishop on the next move (either from b5 or f5), and it is sufficient to win, there were some more forceful continuations:

A) 30.♖e1! wins easily by exploiting Black's back rank problems: 30...♕d4 31.♗f5 g6 32.d7;

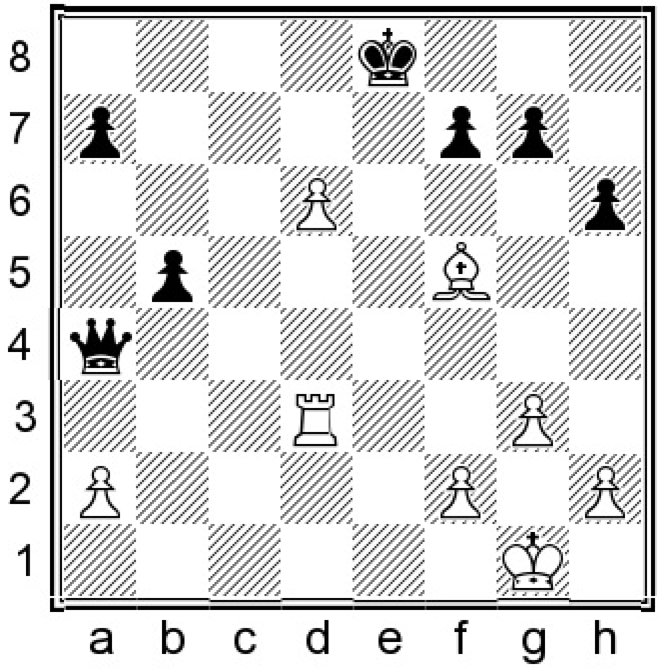
B) 30.♖c1 wins in the same way.

30...♕e4?

The checks prepared by this move are inadequate and the blockade of the pawn with the queen is precarious.

A) 30...♕c4? also fails to pose enough problems: 31.♗f5! ♕c1+ 32.♔g2 ♕c6+ 33.f3 ♕c2+ 34.♔h3 ♕c5 35.♗e4+–;

B) The best idea is 30...♔f8!, because the king, which is always an excellent blockader, is needed to help: 31.♗f5! (it would be desirable to retreat the bishop along the other diagonal, but this is not possible, since if 31.♗c6? ♕c2! and Black wins) and now 31...♔e8 gives White room to go wrong:



analysis diagram

32.d7+?, which is the natural move, even loses: 32...♔d8 and with the king blocking the pawn and the queen active, the lines always become complicated; in this case the advantage passes to Black. But 32.h4! g6 33.♗c8 ♔d8 34.d7 ♕xa2 35.♖e3 ♔c7 36.♖e8 lifts the blockade and wins.

31.♗xb5 ♕e1+ 32.♔g2 ♕e4+ 33.♔g1 ♕e1+ 34.♔g2 ♕e4+ 35.♔f1 ♕h1+ 36.♔e2 ♕e4+ 37.♔f1 ♕h1+ 38.♔e2 ♕e4+ 39.♔d1 ♕g4+ 40.f3 ♕h3

If 40...♕b4 41.d7! and the checks also stop.

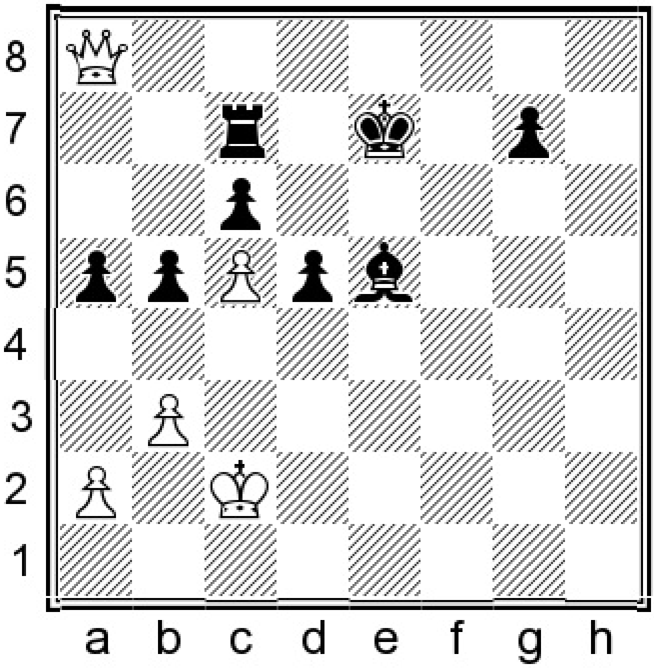
41.d7

Black resigned.

The checks soon run out, e.g. 41.d7 ♕f1+ 42.♔c2 ♕e2+ 43.♖d2+–.

Now for a final case which is difficult to evaluate.

Alvaro Blanco Fernandez 2332
Alexander Shabalov 2611
Dallas 2008



Black to move

Although the white queen is very active, Black can coordinate the strength of his minor pieces with the passed pawn and he has the better winning chances.

34...g5!

Black plays his cards. It will take many moves to support this pawn in the ideal way, but Black will manage it.

35.♕xa5

Here, 35.♔d3!? seems a better idea, bringing the king closer to the pawn and keeping the queen available to get behind the pawn. Then if 35...g4?! the queen returns with 36.♕g8! g3 37.♕g5+ ♔e6 38.♕g6+ ♔e7 and White can already choose between perpetual check and causing some annoyance with 39.♕f5.

35...g4 36.♕e1?!

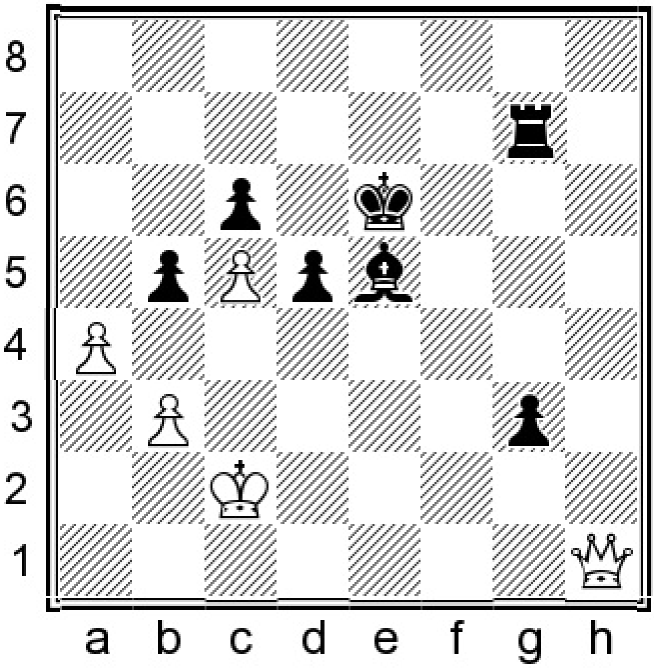
Rather passive. White is already thinking in terms of blockading the passed pawn with his queen, but we have already seen that this is usually a bad strategy. Instead, reactivating the queen with 36.♕a8 was sufficient to force perpetual check, e.g. 36...♔f6 37.♕h8+ ♔f5 38.♕h5+ ♔f4 39.♕h6+ ♔f5 40.♕h5+=.

36...♔e6 37.a4?

This mistake could already have been decisive. 37.♕h4 was better, once again aiming for perpetual check: 37...♖g7 38.♕h6+ ♔d7 39.♕h5 ♔e6 (39...♗d4 40.♕f5+ ♔e7 41.♕f4) 40.♕h6+=.

37...bxa4?

This exchange frees the b3-square for the white king. Of course it was difficult to foresee how this would matter. Instead, advancing the pawn was already winning; let us take a look: 37...g3! 38.♕h1 ♖g7



analysis diagram

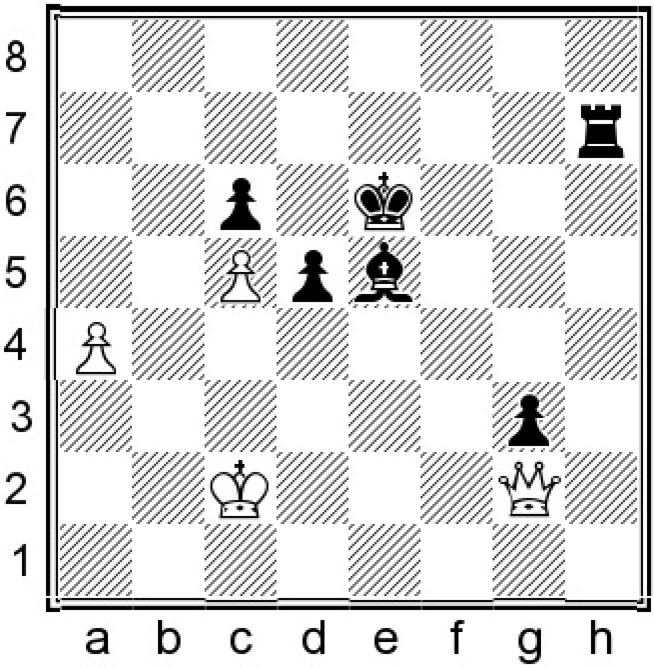
39.♕g2 ♖h7 and Black wins, because he can dislodge the white queen from its blockading position and build a bridge, as happened in the game: 40.♔d3 bxa4 41.bxa4 ♖h2 42.♕f3 g2–+.

38.bxa4 g3! 39.♕h1 ♖g7 40.♕g2

White needs to combine blocking the g-pawn with creating counterplay with the a-pawn, and this should be adequate to save the game.

Instead, 40.♕h3+ would have made things worse for White, e.g. 40...♔e7 41.♕h5 ♗d4 42.♕e2+ ♔d7 43.♕g2 ♗xc5–+.

40...♖h7!



We have reached the final critical moment. Black threatens 41...♖h2, but after the queen moves it will not be easy for Black to protect the pawn on g2 and at the same time control the queening square.

41.♔d3?

Instead, 41.♔b3! ♖h2 42.♕f3 g2 43.♕g4+ ♔f6 44.♔b4! was correct, escaping from Black's threat to build a bridge on g3.

41...♖h2 42.♕f3 g2 43.♕g4+ ♔f6 44.a5 ♖h3+–+

And Black won in 56 moves.

Chapter 15
Queen vs two rooks

We shall conclude the book with the struggle of queen vs two rooks, which also has many middlegame aspects.

It is generally accepted that two rooks are slightly superior to a queen. This evaluation is very debatable in the middlegame, because the queen can quickly coordinate with any minor piece and its potential for attacking the king is greater than that of the two rooks. But in the endgame this evaluation can be accepted as correct, above all because there are fewer opportunities to attack the king. However, the queen can manage to attack the enemy king with just the collaboration of a pawn, and this is one of the cases in which it tends to have the initiative against the rooks. The other case is when the rooks are unable to be connected, or when this can only be achieved on their back rank, when fighting against a passed pawn which is far enough advanced to prevent them leaving.

In contrast, situations favourable to the rooks abound when they are well coordinated (which usually means that they are defending each other). The rooks are far superior when their side has a passed pawn, and also when the enemy pawns are split and can be attacked one after another.

Pattern 98 Two rooks + a passed pawn

One of the circumstances which favours the rooks is the presence of isolated passed pawns: the rooks can easily support a passed pawn of their own side, reducing the enemy queen to passivity, while for their part the rooks can usually halt an enemy passed pawn without many problems, as long as it does not reach the seventh rank.

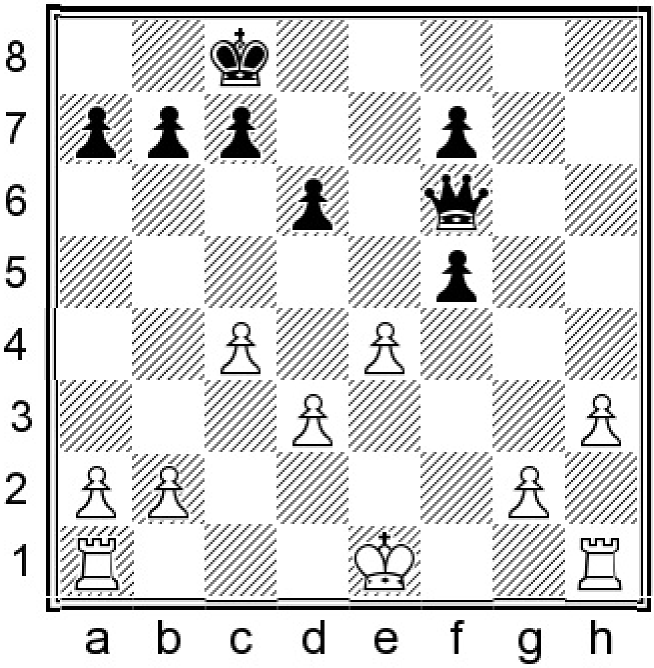
Here is a classic example, which illustrates this theme clearly.

Alexander Alekhine
Andor Lilienthal
Hastings 1933 (3)

The position in the diagram is much better for White, due to the presence of the passed h-pawn.

White has a very simple plan: to coordinate the rooks and push the pawn.

It is more important for White to connect the rooks than to keep the extra pawn, so White’s next move is:



White to move

25.0-0-0! fxe4 26.dxe4 ♕f4+ 27.♖d2?!

A strangely unharmonious move on Alekhine’s part.

27.♔b1! is the natural continuation of the plan and after 27...♕xe4+ 28.♔a1 Black can capture two different pawns, but the variations are similar: 28...♕xc4?! (28...♕xg2 29.h4 ♕g7 30.h5 ♕h6 31.♖df1, with the idea of ♖f7 and then bringing the rook to g6, 31...f6 32.♖fg1 ♔d7 33.♖g6 ♕h7 34.h6! and now the pawn cannot be stopped) 29.h4! ♕e6 30.h5 ♕h6 31.♖df1! f6 (31...♕h7 32.h6 ♔d7 33.♖xf7+!; this type of deflection sacrifice is natural when the blockaded pawn is on the sixth rank) 32.♖f4!+–, followed by ♖g4, ♖g6 and h5-h6.

These variations suggest that Black should forget about winning material and instead should stop the pawn with 28...♕h4! 29.g3 ♕h5 30.h4 f5!, which would force White to change his plan slightly and try to attack the f5-pawn, starting, for example, with 31.♖d4 ♔d7 32.a3±.

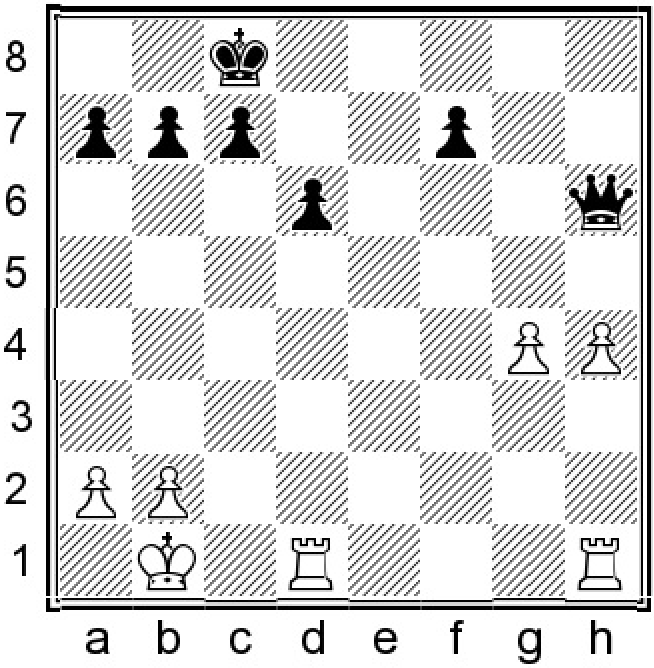
27...♕xe4 28.h4 ♕xc4+ 29.♔b1 ♕f4 30.♖dd1

Finally the rook returns to the back rank to connect with its comrade. The position is very similar to the one we saw in the 27.♔b1! variation, but the black queen is closer to the blockade and has time to create counterplay.

30...♕h6

30...f5 is another interesting plan but I think that the one in the game is quite correct.

31.g4



The white pawns advance, determined to assist the passed pawn to queen. In these situations, the attempt to blockade does not usually work, because the rooks are more effective at this sort of task. Black should turn his attention to the old plan in queen endings, perpetual check, analysed in several parts of that chapter. It is curious that the resources employed in both cases are the same.

31...♔d8

The plan of fetching the king is natural, but slow. The other logical plan to harness the queen's abilities is to advance the queenside pawns to open up the black king, which Black starts on the following move. Let us analyse it now: 31...a5! 32.h5 a4 33.a3 (33.♖dg1 a3! 34.bxa3 ♕e3 and with the white king now exposed, perpetual check is assured) 33...b5! 34.♖dg1 b4 35.axb4 (35.g5 ♕e6 36.h6 ♕e4+ 37.♔a1 bxa3 and once again perpetual check is unavoidable) 35...a3 36.bxa3 ♕e3, with perpetual check. These three variations make the character of these positions very clear, which is that of a race between the advance of the passed pawn and the search for counterplay by means of perpetual check, as we have already seen in the section on queen endings.

32.♖de1?!

It is also natural to cut off the king, but this is unnecessary, losing a tempo: 32.h5 ♔e7?! (32...b5!) 33.♖de1+ ♔f8 34.♔a1! followed by g4-g5, freeing the h-pawn to advance.

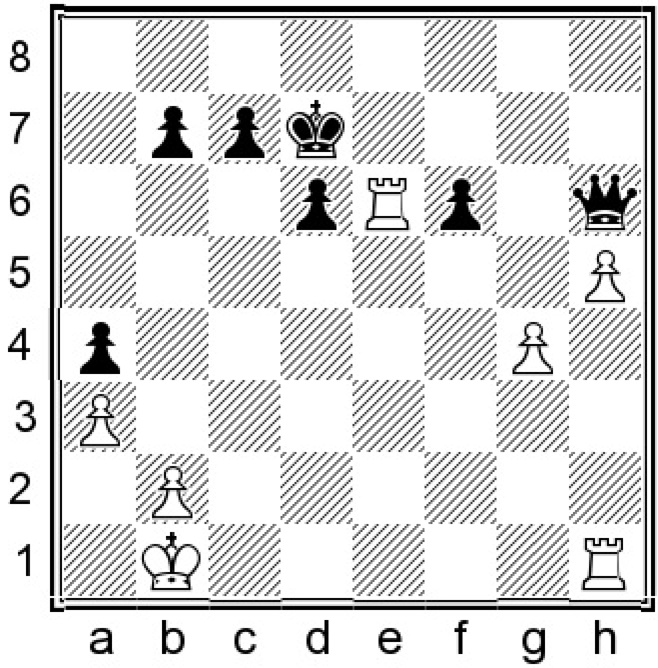
32...a5 33.h5 a4 34.a3 f6

34...b5! – as we have already seen in the previous variation, the correct plan is to expose the white king.

35.♖e6 ♔d7

Forcing White’s little combination, which is a winning one.

Instead, 35...b5! would still have created a lot of counterplay, e.g. 36.g5 ♕xg5 37.h6 ♕g2 38.♖ee1 ♕g6+ 39.♔a1 ♕h7 40.♖e6 (40.♖h4 ♔d7 41.♖g1 ♔e6 42.♖g7 ♕c2 43.♖h1 b4 44.♖xc7 ♕e4! 45.♖cc1 ♕d3! 46.h7 bxa3 and once again Black has a perpetual: 40.♖eg1 b4 41.axb4 a3 42.bxa3 ♕d3, with perpetual check) 40...b4! 41.axb4 a3 42.♖e3 axb2+ 43.♔xb2 ♔d7 and a certain equilibrium has been reached; the rooks are preventing perpetual check but they do not appear able to unblock the pawn, so the position seems to be drawn.



36.g5!

This is decisive.

36...♕xg5 37.h6 ♕g2 38.♖ee1 ♕g6+ 39.♔a1 ♕h7 40.♖eg1 ♔e6 41.♖g7 ♕e4 42.♖hg1 ♕h4 43.h7 b5 44.♖xc7 ♕h5 45.♖e1+ ♔d5 46.♔a2 ♔d4 47.♖d1+ ♔e4 48.♖xd6 ♕e8 49.♖xf6 ♕h8 50.♖h6 ♔f4 51.♖c8 ♕xc8 52.♖h4+ ♔g5 53.h8=♕ ♕e6+ 54.♔b1 ♕e1+ 55.♔c2 ♕e2+ 56.♔c3 1-0

Pattern 99 Attack on the king

The queen can overcome the two rooks when at least one of the following circumstances is present:

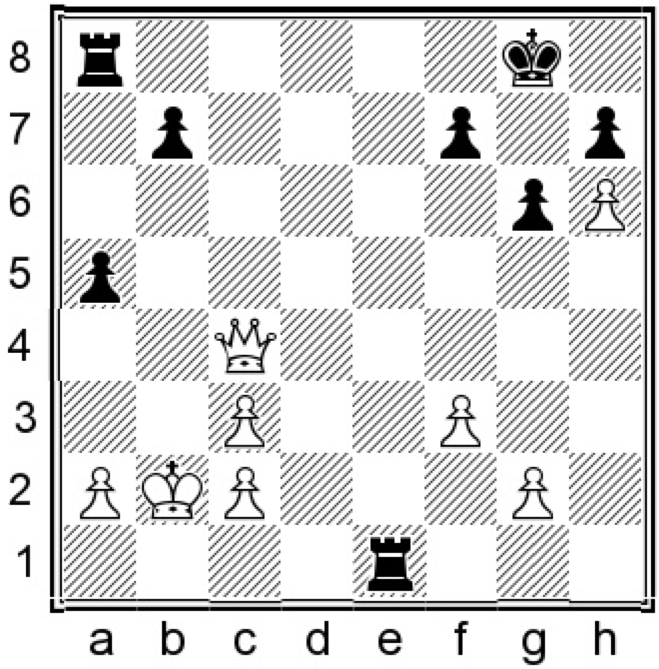
1) there is a pawn which allows an attack on the king;

2) the rooks are not connected.

It is better still if both circumstances apply.

We shall begin with a case in which a pawn is wedged into the castled position.

Bobby Fischer
Donald Byrne



Black to move

26...♖h1

Probably after checking out other variations, Black decided to try to eliminate the annoying pawn. Let us consider some other tries:

A) 26...♖ee8? (the plan of connecting the rooks fails) 27.♕d4 (threatening mate) 27...♔f8 (27...f6 28.♕xf6, followed by mate) 28.♕d6+ ♔g8 (28...♖e7 29.♕f6 ♖ee8 30.g4 transposes) 29.♕f6 ♔f8 30.g4 ♖a6 31.♕g7+ ♔e7 32.♕xh7 and White will win, thanks to the strength of his h-pawn;

B) 26...♖e6? is even worse: 27.♕d4 f6 28.♕d7+–.

26...♖h1 27.♕f4 ♖f8 28.c4!

White advances this pawn, because he foresees that this will be his next passed pawn.

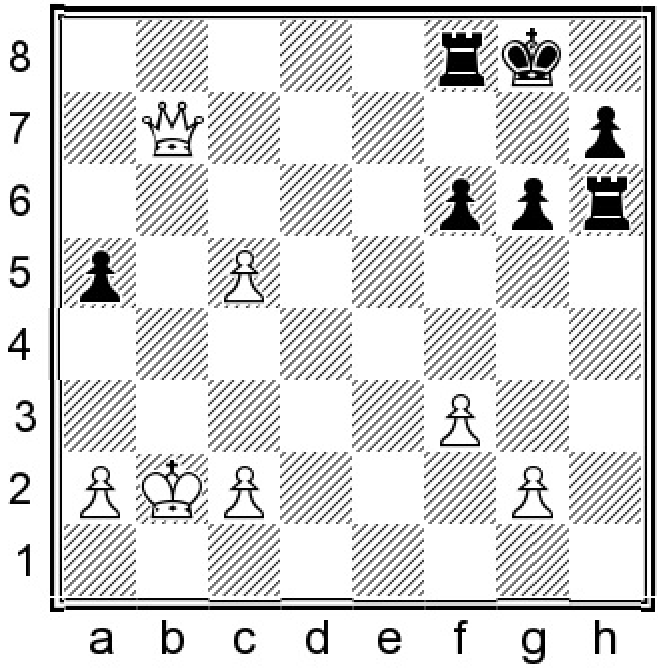
28...f6

There is no other way to make progress.

29.c5 ♖h5 30.♕c7

Exchanging the h-pawn in order to reach another scenario.

30...♖xh6 31.♕xb7



Now White wins, because the rooks are unable to coordinate against the passed pawn and capture it. By the time the rooks are connected, the pawn will already be on the seventh rank and will prevent them from doing anything active.

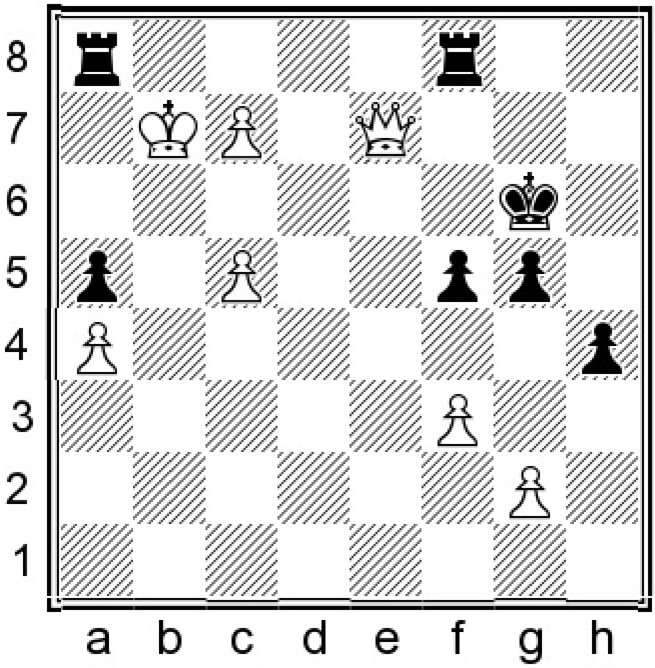
31...♖h5 32.c6 ♖e5 33.c7 ♖ee8

Just in time to prevent the promotion, but with the two rooks now passive on the back rank, the plans to force the promotion of the pawn, which include the participation of the king, are easy to implement.

34.♔b3 g5 35.♔a4 ♖a8 36.c4 h5 37.c5 h4 38.♔b5 ♔h8 39.a4 ♔g8 40.♔b6

White now threatens 41.♕xa8, although this is not the only way to win.

40...f5 41.♕d5+ ♔g7 42.♔b7 ♔g6 43.♕e6+ ♔g7 44.♕e7+ ♔g6



45.f4!

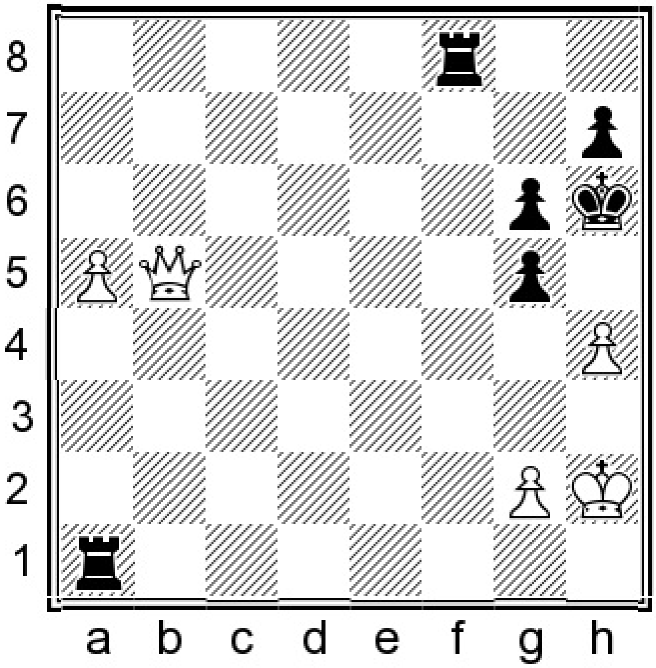
Weakening the black pawn majority, before executing the winning plans with the passed c-pawns.

45...gxf4 46.♕xh4

And since Black is unable to prevent the exchange of the queen for a rook, followed by the promotion first of one c-pawn and then the other, he resigned.

The queen can often save a tight situation using its classic capabilities, combining mating threats with ideas of perpetual check.

Anatoly Karpov
Jan Timman
Tilburg 1977 (1; analysis)



Black to move

In this position, the white queen can take advantage of all of its tactical capabilities to prevent Black from achieving a winning endgame based on the initial superiority of the two rooks.

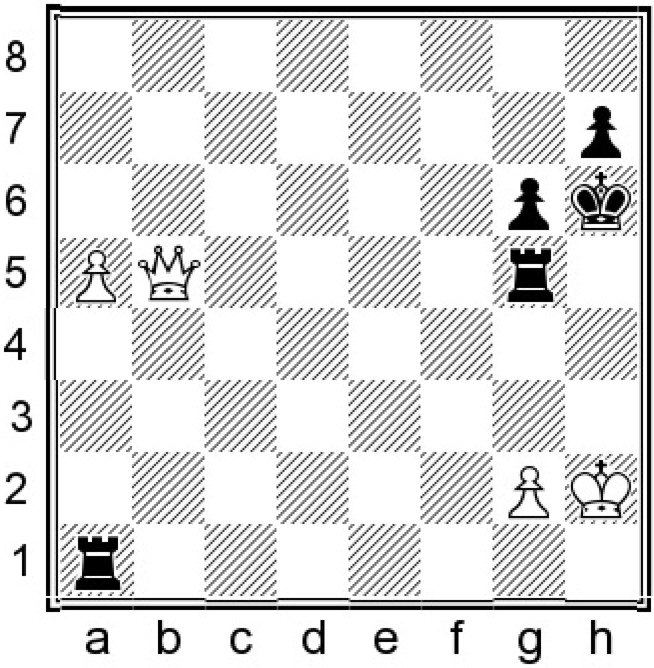
52...♖f5

This try is the most dangerous one, but for Black too. The game continuation was more prosaic: 52...gxh4 53.♕e5 ♖ff1, with a draw.

52...♖f5 53.hxg5+ ♖xg5

If 53...♔xg5 54.♕d7=.

Now the pawn will fall, but...



54.♕b4! ♖axa5

54...♖gxa5 allows a simple perpetual check: 55.♕f8+ ♔g5 56.♕e7+ ♔h6 (56...♔h5 57.♕xh7+) 57.♕f8+=.

55.♕f8+ ♔h5 56.♕f7

And now Black must choose between repeating the position, losing the h-pawn or unexpectedly getting mated:

56...h6?

The black king is on the edge of the board and can hardly move now. The white king supports the attack.

57.♕f3+ ♖g4 58.♔h3 ♖aa4 59.♕d5+ ♖g5

Or 59...g5 60.♕f7#.

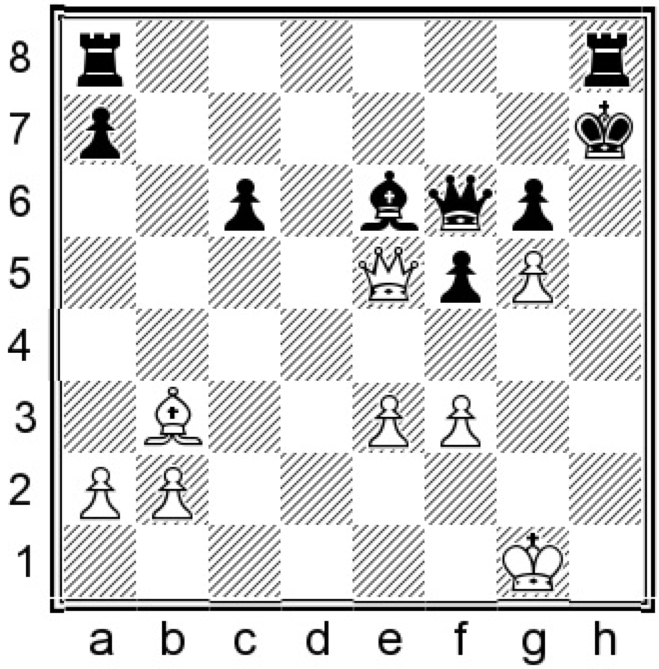
60.g4+! ♖axg4 61.♕f3

Zugzwang.

61...♖a5 62.♕xg4#

We are going to see the following game twice in the same chapter, but in different sections and with a different decision taken at this point:

Viktorija Cmilyte 2503
Kateryna Lahno 2557
Wijk aan Zee 2012 (7)



White to move

The bishops are going to be exchanged, so after capturing the black queen we are going to reach an ending of queen vs two rooks. As previously mentioned, the advantage of the queen in these endings resides in a possible attack on the king and not in separated passed pawns. Therefore White should capture on f6 with the pawn:

31.gxf6!

Now the pawn will help in the attack led by the queen. The variations are very convincing. 31.♕xf6 is analysed in **Pattern 100**, where the rooks manage to defend.

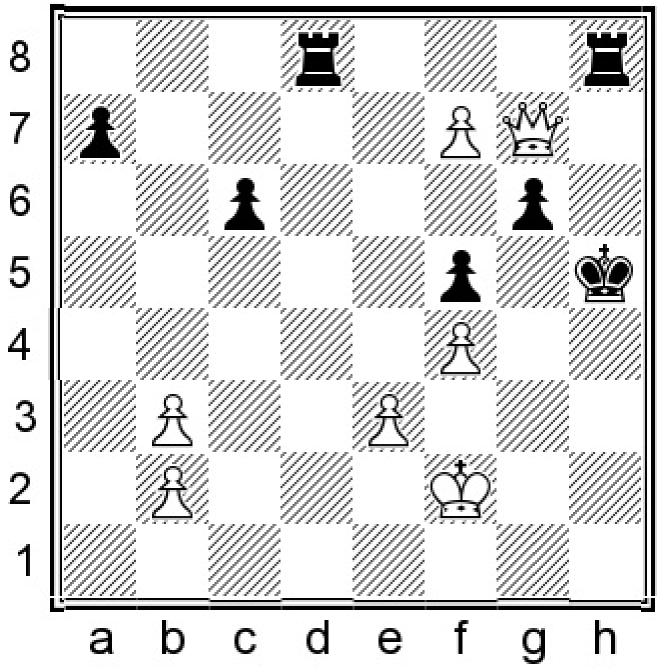
31.gxf6! ♗xb3 32.axb3 ♖af8

32...♖he8 allows mate in four, starting with 33.♕h2+ ♔g8 34.♕c7!, followed by mate on g7.

33.♕e7+ ♔h6 34.♕g7+ ♔g5 35.f7

With the arrival of the pawn on the seventh, the rooks are now confined to the back rank.

35...♖d8 36.♔f2 ♔h5 37.f4



And Black can do nothing more than wait as the white king arrives to complete the mating attack:

37...♖df8 38.♔g3 ♖c8 39.e4 fxe4 40.f5 gxf5 41.♔f4,

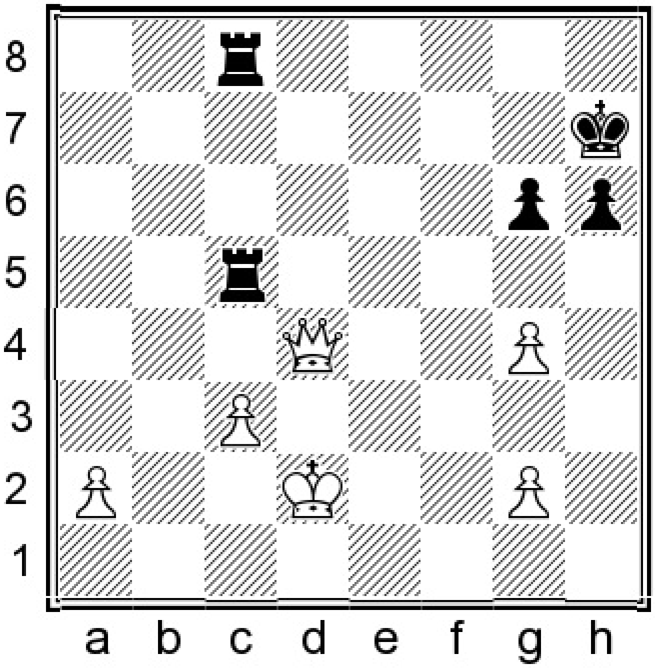
followed by mate.

Pattern 100 The uselessness of separated pawns

A very special characteristic of these endings is the low value of separated pawns on the side of the queen, even if they are passed. However, the coordination of the rooks is key if they are to take any advantage of this.

As we have already seen, to win the queen, all the two rooks need is one passed pawn, but in the following examples not even two passed pawns are enough to help the queen.

David Recuero Guerra 2455
Mikel Huerga Leache 2440
Gijon 2011 (6)



Black to move

In this case, even two pawns are not enough to create problems for Black. Instead, White should be thinking about how to draw.

36...♖8c7!

Preventing checks on the seventh rank.

37.♔c2 ♖c4 38.♕e5 ♖a7 39.g5?!

Exposing Black’s king to checks is appropriate, but this move fails in that regard. White should have defended his a-pawn, but at this point it is clear that he was thinking about winning. It was better to play 39.♔b2 ♖ca4 40.♕e6 ♖b7+ 41.♔c2 ♖ba7=.

39...♖g4! 40.gxh6

The pawn on h6 has an almost negative value, because it does little more than protect the black king from frontal checks. 40.g3 ♖xg5 41.♕b8 ♖ga5 also seems problematic.

40...♖xg2+ 41.♔b3 ♖b7+ 42.♔c4?

This seems to be the decisive mistake. Instead, 42.♔a3 is very ugly but it should draw: 42...♖a7+ 43.♔b3 ♖gxa2 44.c4! (the black rooks need to be reorganised to capture the c-pawn, but it is not easy for them to do this) 44...♖2a6 45.♕c5! (not 45.c5 ♖c6, which would win the pawn easily) 45...♖f7 46.♔c3 ♖aa7 47.♕b6 ♖ac7 48.c5 ♖c8 49.♕d6 ♖fc7 50.♔b4, and if Black captures the pawn White has perpetual check.

42...♖xa2 43.♔d3 ♖a6

Now the c-pawn will also fall and the ending will be lost.

44.♔e3 ♖c6 45.♔f3

It is useless to defend the pawn with the king, because the pawn ending is losing, e.g. 45.♔d3 ♖bc7 46.♔c2 ♖xc3+ 47.♕xc3 ♖xc3+ 48.♔xc3 ♔xh6–+.

45...♖bc7 46.♔g2 ♖xc3

The Lomonosov tablebases confirm that this ending is lost for White. The h6-pawn even makes Black's task easier. Thanks to the ease with which it can give perpetual checks, a queen can usually draw against two rooks + a pawn which is not very far advanced, but if the pawn is a knight's pawn (which hinders checks in two directions), the side with the queen normally loses.

47.♕d6 ♖3c5 48.♔g3 ♖g5+ 49.♔f4 ♖f5+ 50.♔e4 ♖cf7 51.♕h2 ♖f3 52.♕e5 ♖f1 53.♕h2 ♖e1+

Black initiates a curious and unstoppable plan: the white king will be driven across to the a-file, after which Black will force either mate or the win of the queen.

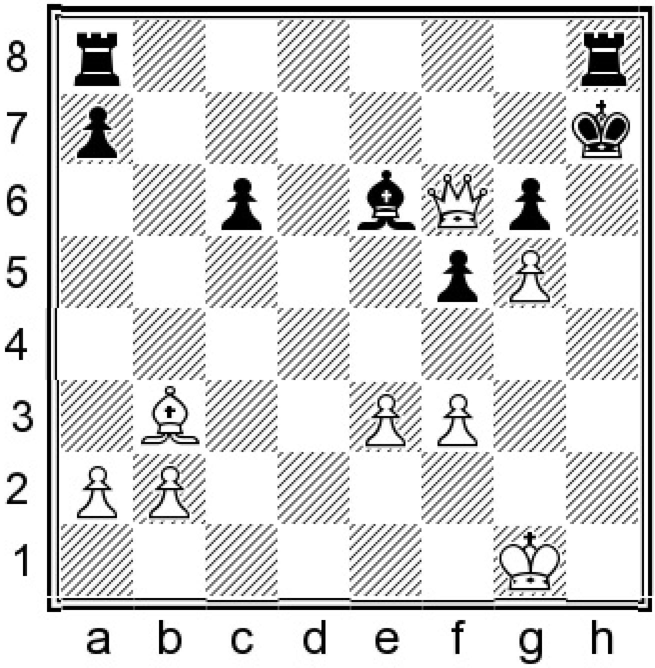
54.♔d5 ♖d7+ 55.♔c6 ♖ed1 56.♕f4 ♖1d2 57.♕e3 ♖2d6+ 58.♔c5 ♖d3 59.♕e1 ♖c7+ 60.♔b6 ♖dc3 61.♕a1 ♖3c6+ 62.♔b5 ♖c1 63.♕d4 ♖b1+ 64.♔a6 ♖cb7

The imprisoning manoeuvre has finished.

65.♕c3 ♖1b6+ 66.♔a5 ♖b3 67.♕c5 ♖a3+ 0-1

We now return to the final game of **Pattern 99**, this time with the queen capturing on f6, which was the game continuation and proves to be much weaker.

Viktorija Cmilyte 2503
Kateryna Lahno 2557
Wijk aan Zee 2012 (7)



Black to move

31...♗xb3 32.♕e7+! ♔g8 33.♕b7?! ♖f8 34.♕xb3+ ♖f7

The rooks start to coordinate and normally in this phase they are equivalent in worth to the queen + one pawn.

But in this case White is two pawns up, which should provide winning chances.

35.♕e6 ♔g7 36.♕xc6 ♖h5!

Hindering the creation of a passed pawn on the kingside.

37.f4 ♖h8 38.♕c3+

Naturally White could have started the advance of the two queenside pawns immediately, e.g. 38.a4 ♖b8 39.b4 ♖d8 40.♔f2 ♖dd7 41.b5 ♖c7 42.♕e6 ♖ce7 43.♕b3 ♔h7 44.a5 ♖b7=. Now White's two passed pawns are easily controlled and in particular the b-pawn will never be unable to cross the b7-square. Even if it advances very soon, the rooks can regroup and capture it, for instance 45.b6 axb6 46.axb6 ♖f8!, followed by ...♖fb8 and the capture of the pawn.

38...♔h7 39.♕d2 ♖e8

Despite White's two extra pawns the position seems a clear draw. Each of the possible passed pawns would be isolated and the rooks could easily blockade it and then attack it. White's only imaginable winning try would be for his king to support a distant passed pawn on the queenside, but meanwhile e3 would be falling.

40.♔f2 ♖e6 41.b4 a6!?

41...♖ee7 also works.

42.♕d5 ♖fe7 43.♕c5 ♖d7 44.♕f8 ♖dd6?!

A strange move, but even so it is still a draw.

45.♕f7+ ♔h8 46.♔f3 ♖c6 47.a4 ♖cd6 48.♔e2 ♖c6 49.b5 axb5 50.axb5 ♖cd6 51.♔f3?!

White now falls for a little trick which closes the case, but there was no way to make progress.

51...♖xe3+! 52.♔xe3 ♖d3+ (the *crazy rook* theme) **53.♔e2 ♖d2+ 54.♔e1 ♖d1+ 55.♔f2 ♖d2+ 56.♔g3 ♖d3+ 57.♔h4 ♖h3+ 58.♔xh3 ½-½**

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Chapter 16
Exercises

Throughout the book we have often insisted on the idea that this is a practical manual. Nothing could be more logical, therefore, than to put our new knowledge to the test with a few exercises. It will not be enough to put it to the test now though; the ultimate test will be making use of the knowledge in our games. But until that chance moment comes along, we test you with some positions chosen with that purpose in mind.

I recommend tackling the exercises after reading the whole book, although readers can adapt them to their own preferences, playing level and prior knowledge.

The first exercises are easier, but as this is always a subjective judgement, it is difficult to say when they increase their level of difficulty. For anyone wishing to make an initial division, I would say that at around number 40 the exercises start to be slightly more difficult. But what is certain is that the final ten are something special and require a greater effort. You must not be disappointed if you cannot solve them.

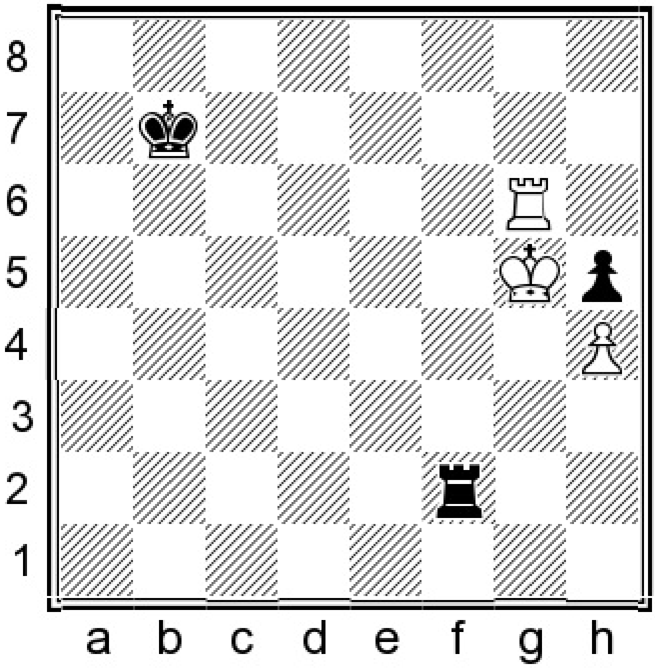
Some of the exercises are more beautiful and more striking than the positions chosen for the explanation part of the book. This will be because certain positions were chosen not for their difficulty or their beauty, but for their clarity, while others appear in the Exercises section because they are much more suitable for the typical problem situation, where a critical and if possible somewhat unexpected decision is required. In addition, it may be that some of them cover several different themes, which made it difficult to classify them in a specific section.

In many cases, the exercise presents the moment to decide about simplification, which is the connecting point between the middlegame and the endgame, or between one ending and another, simpler, ending. In any case this is a type of decision which is well worth practising and observing in our own games, both when we play them and when we do a post-game analysis. Now it is no longer just a matter of simplifying to reach a theoretical basic endgame but to reach a more or less recognisable pattern.

And a final few words on solving the exercises. You should see this as a training session, and keep them for times when you can approach them energetically. It is a shame not to make good use of interesting positions which can help us to develop our skills, treating them as if they were simply an entertaining read.

So, tackle them with a will. Good luck.

1



White to move

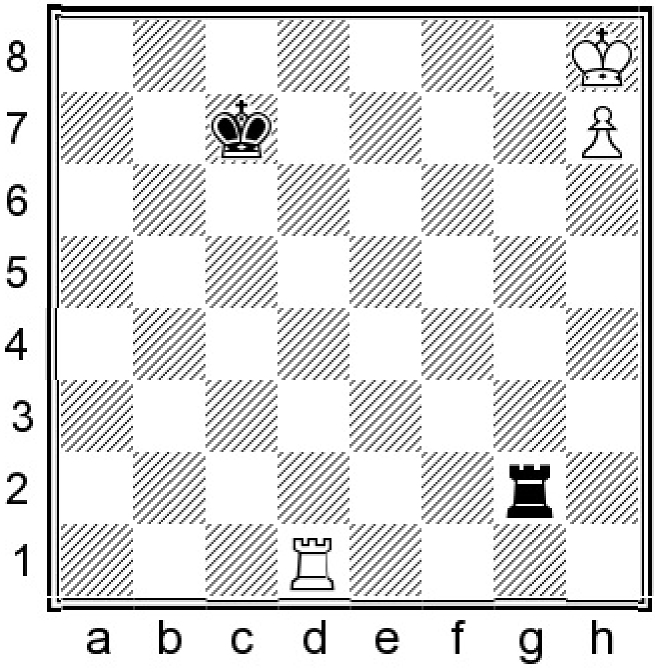
Can White win?

Show/Hide Solution

1
Natalia Zhukova 2450
Natalia Pogonina 2471
Plovdiv 2008 (7)

Yes. White wins by cutting off the king with **48.♖d6!**. 48.♔xh5? allows the black king to approach: 48...♔c7 49.♖e6 ♔d7 50.♖e1 ♖g2 51.♔h6 ♖g4 52.h5 ♖g2 53.♔h7 ♖g5 54.h6 ♖g2 55.♔h8 ♖g6 56.h7 ♖g2 with a theoretically drawn position.

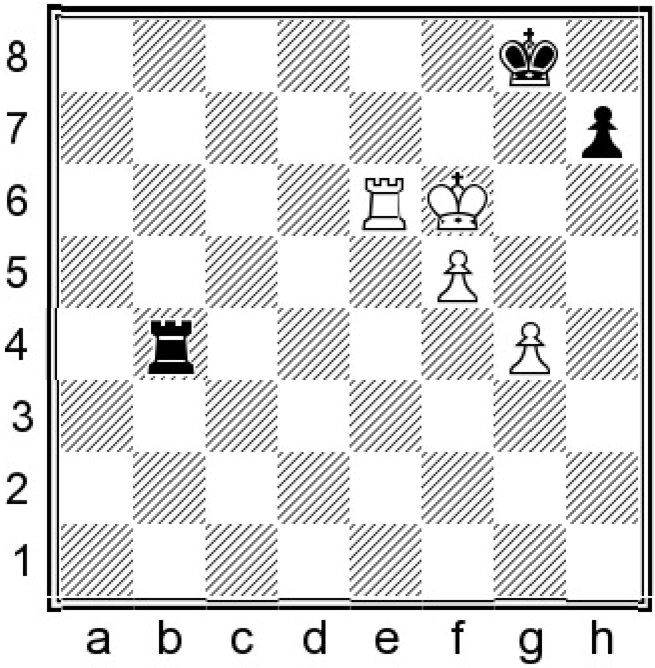
48.♖d6! ♔c7 49.♖d1 ♖g2+ 50.♔xh5 ♖g3 51.♔h6 ♖g4 52.h5 ♖g2 53.♔h7 ♖g5 54.h6 ♖g2 55.♔h8 ♖g6 56.h7 ♖g2 and now the position is won.



See *100 Endgames You Must Know*, **Ending 67**:

57.♖a1! ♔d7 58.♖a8 ♔e7 59.♖g8 ♖f2 60.♔g7 ♖g2+ 61.♔h6 ♖h2+ 62.♔g6 1-0

2



Black to move

How should Black defend?

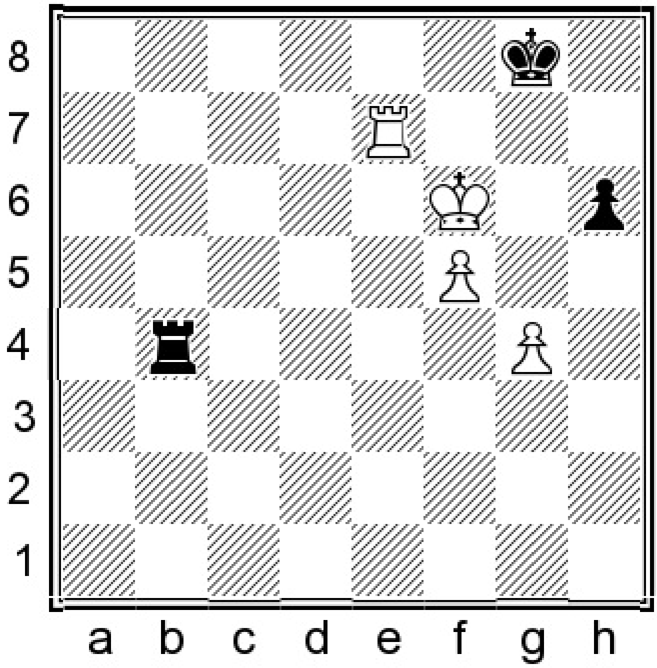
Show/Hide Solution

2
Vasja Pirc
Boris Kostic

Ljubljana ch-YUG 1947 (16)

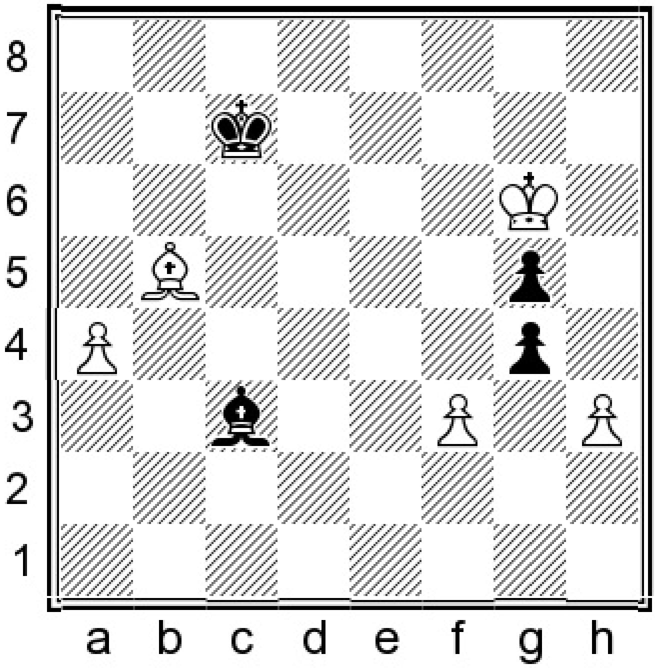
55...♖b8! is the correct move, when White can make no progress.

But the two games that reached this position both continued with the erroneous 55...h6? (stopping the mate and maintaining the attack on g4): 56.♖e8+ ♔h7 57.♖e7+ ♔g8 (or 57...♔h8 58.g5! hxg5 59.♔g6 ♖b8 60.f6 ♔g8 61.♖g7+ ♔h8 62.♖h7+ ♔g8 63.f7+ 1-0 (66) Bachmayr-Biro, Austria Bundesliga B 1996/97)



58.g5! hxg5 59.♔g6 1-0. *The umbrella* – see **Pattern 65**.

3



White to move

Which way should White recapture on g4?

Show/Hide Solution

3

Jesus de la Villa

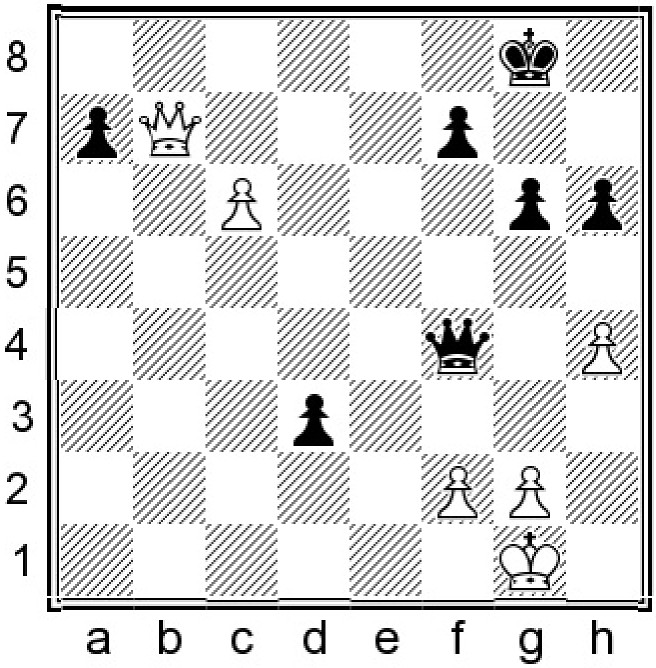
Borja Navarro

Lorca 2002

White must recapture in such a way that he can subsequently create a passed pawn. **55.fxg4!** allows him to create a second distant passed pawn (not 55.hxg4? ♗d2):

55.fxg4! ♝d2 56.♔h5 ♔b6 57.h4 gxh4 58.♔xh4 and with two distant passed pawns White wins.

4



White to move

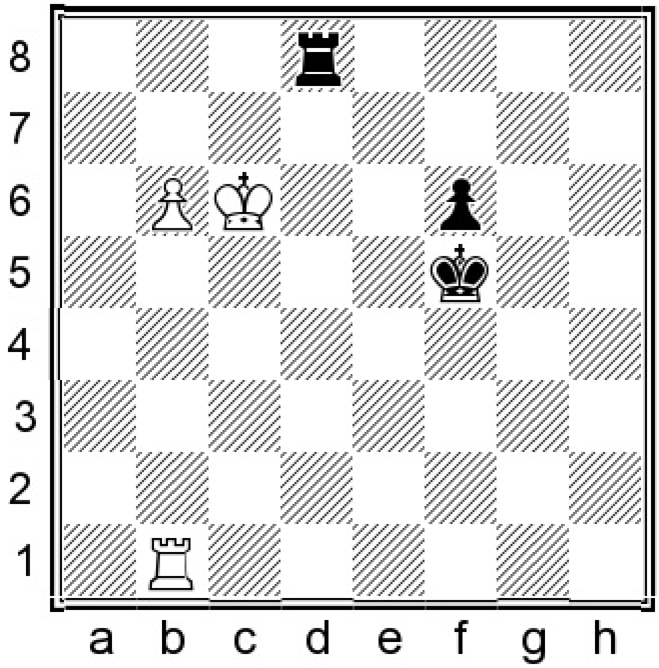
Should White advance his pawn?

Show/Hide Solution

4
Johan Hellsten 2420
Fredrik Lindgren
Sollentuna 1995 (8)

Yes, White can advance the pawn because with the queen on b7 there is no perpetual check: **34.c7** With the queen on b7, and the long diagonal open, the perpetual check pattern f4-c1 fails. **34...♕c1+ 35.♔h2 ♕f4+ 36.g3 ♕xf2+ 37.♕g2! ♕f5** 37...♕c5 38.♕a8+ ♔g7 39.c8=♕ **38.♕a8+ ♔h7 39.c8=♕ ♕f2+ 40.♕g2 ♕d4 1-0**

5



Black to move

Can Black save himself with his passed pawn?

Show/Hide Solution

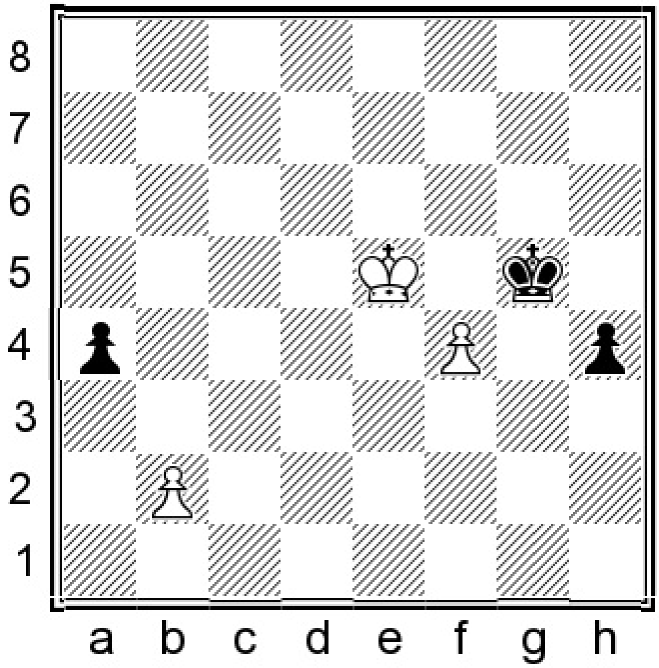
5
Alexander Alekhine
Efim Bogoljubow
GER/NED Wch m 1929 (19)

This is a historic mistake made in a World Championship match. Bogoljubow chose to send his king to the wrong side:

70...♔g4? 70...♔e4! is the only move to draw and after 71.b7 f5 72.b8=♕ ♖xb8 73.♖xb8 f4 the white king is unable to approach, because the black monarch stands in his way: 74.♖b4+ (74.♔d6 f3 75.♖b4+ ♔e3 76.♔e5 f2=; 74.♖e8+ ♔d3 75.♖f8 ♔e3 76.♔d5 f3 77.♔c4 f2=) 74...♔e3 75.♔d5 f3 76.♖b3+ ♔e2 77.♔e4 f2 78.♖b2+ ♔e1 79.♔e3 f1=♘+=.

70...♔g4? 71.b7 f5 72.b8=♕ ♖xb8 73.♖xb8 f4 74.♔d5 f3 75.♔e4 f2 76.♖f8 ♔g3 77.♔e3 1-0

6



Black to move

Where should the black king go?

Show/Hide Solution

6

Martin Hago

Albert Hodges

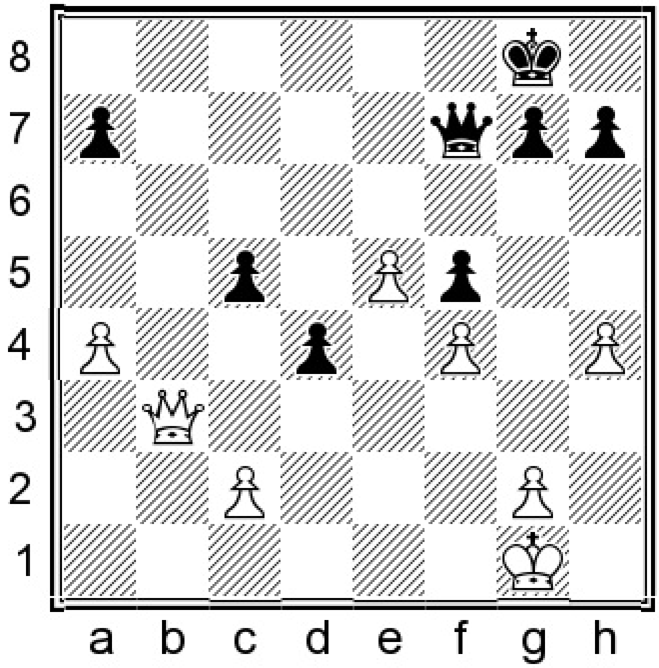
New York 1923

Black wins by retreating his king in such a way that he cannot be checked.

48...♔h6! Not 48...♔g6? 49.♔e6 h3 50.f5+ ♔g7 51.♔e7=.

48...♔h6! 49.♔e6 h3 50.f5 h2 51.f6 h1=♕ 52.f7 ♔g7 0-1

7



Black to move

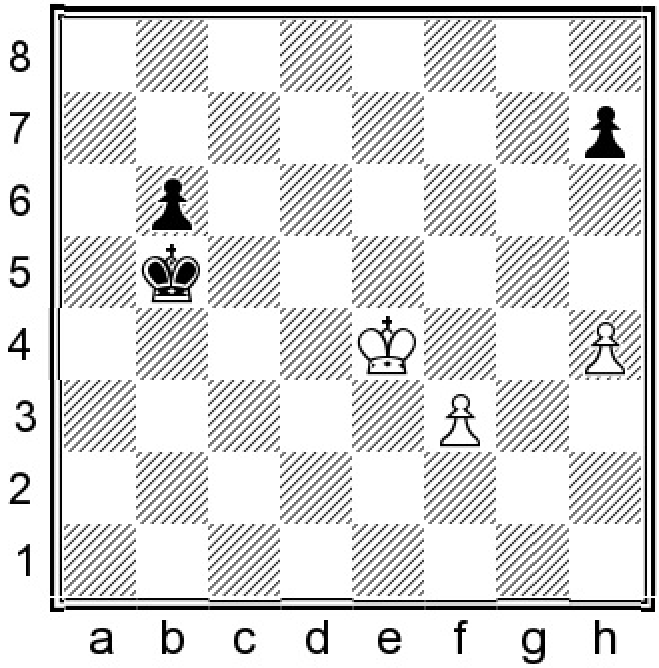
Should Black exchange on b3?

Show/Hide Solution

7
Bernd Laube 2417
Alex Herrera 2275
cr 2009

Yes, Black can draw by exchanging on b3 with **31...♕xb3 32.cxb3 a5!**, as long as he has seen this key move, which makes the black majority invulnerable. Any other move loses, e.g. 32...♔f7? 33.a5!, with the plan of transferring the king to c4, playing b4 and then capturing the two black pawns which will then be hanging.

8



White to move

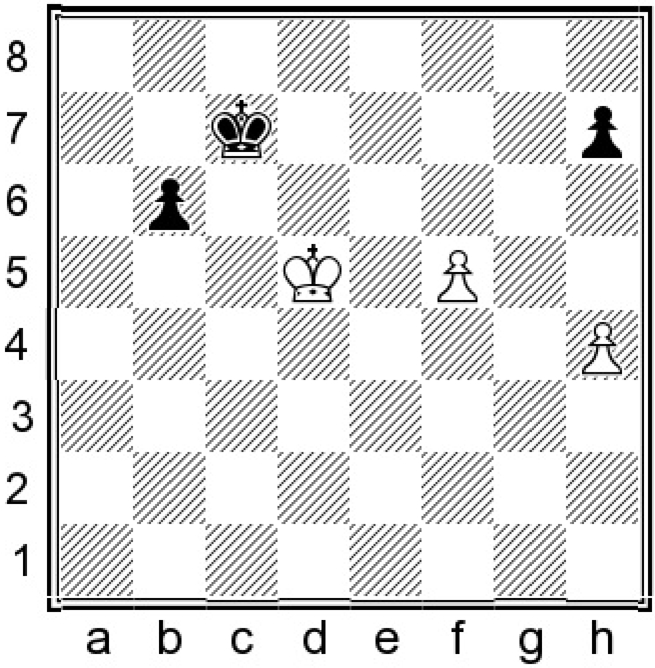
What can White achieve?

Show/Hide Solution

8
Juan Asqui Arevalo
Jahir Silva Paredes
Riobamba 2012

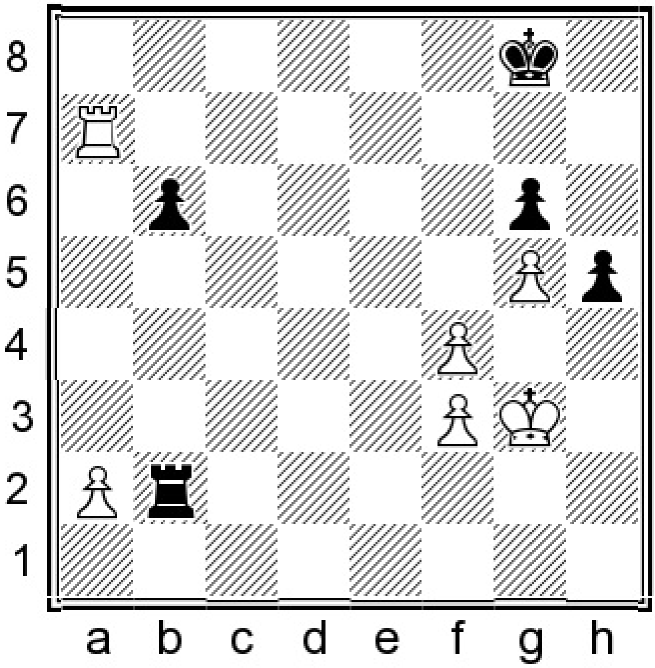
White can achieve more than is immediately apparent:

1.♔d5! Thanks to this bodycheck the white pawn will queen first. **1...♔a6 2.f4 ♔b7 3.f5 ♔c7**



4.♔e6! ♔d8 5.♔f7! Preparing the arrival of the pawn. **5...b5 6.♔g7 b4 7.f6 b3 8.f7 b2 9.f8=♕+**, queening with check.

9



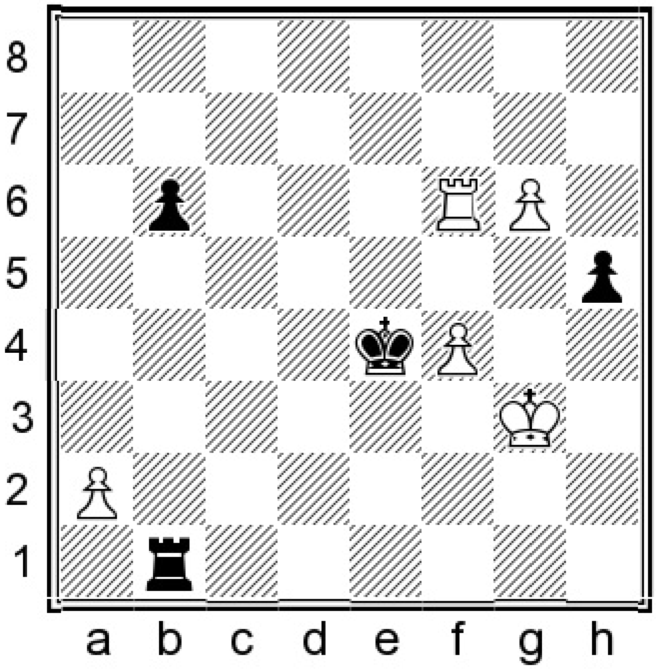
White to move

Does White have a plan for making progress?

Show/Hide Solution

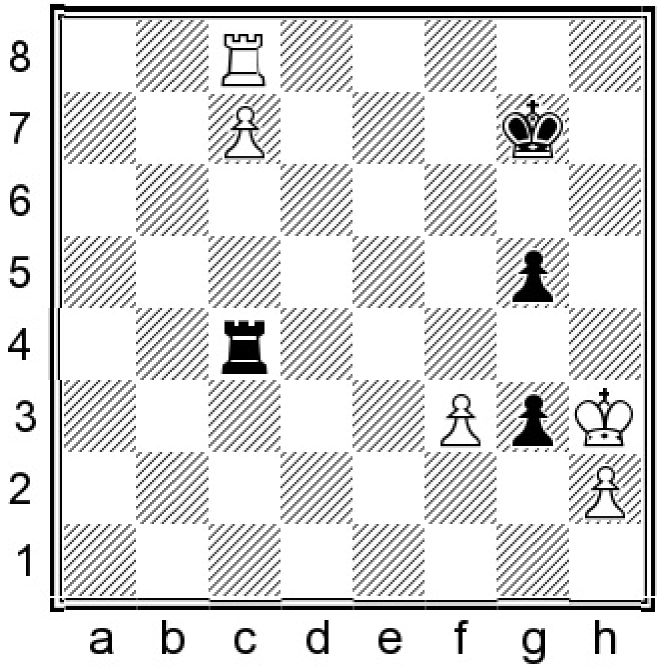
9
Vladimir Kramnik 2765
Judit Polgar 2665
Novgorod 1996 (4)

If you have studied the examples of **Pattern 68** you will easily discover White’s plan: **35.f5! ♖b5** 35...gxf5 36.♔f4 ♖b5 (36...h4 37.♔xf5 h3 38.♔f6 h2 39.g6+–) 37.g6 and the white king advances to support the passed pawn in all variations. **36.♖a8+!** Important, so that the pawn advances with check and White doesn’t lose the g5-pawn. **36...♔f7** 36...♔g7 37.f6+ ♔f7 38.♖a7+ ♔f8 39.f4+–. **37.fxg6+ ♔xg6 38.f4 ♖b1 39.♖g8+ ♔f5 40.♖f8+ ♔e4 41.♖e8+ ♔f5 42.♖e5+ ♔g6 43.♖e6+ ♔f5 44.♖f6+ ♔e4 45.g6**



and the pair of pawns wins automatically.

10



White to move

What should White take with on g3?

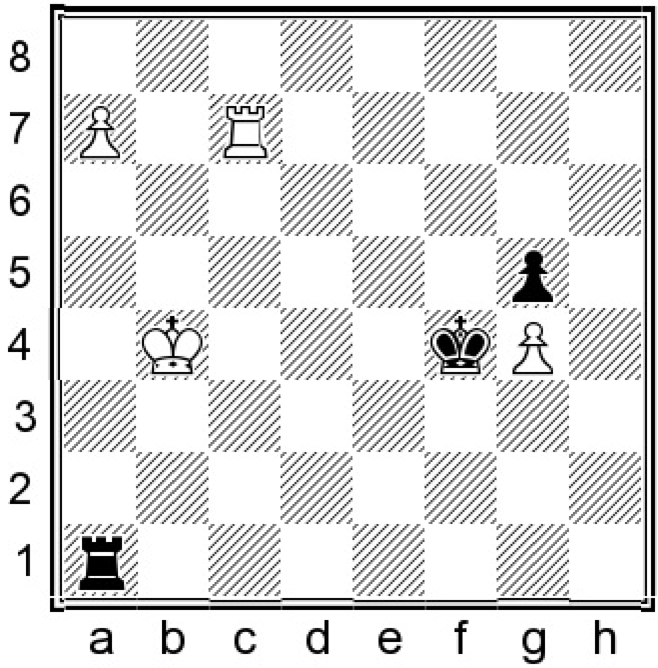
Show/Hide Solution

10
Khaunin
Fridman
Leningrad 1962

White will win if he can obtain a passed f-pawn and he thought he could do so with the incorrect **1.hxg3??**. Instead, after 1.♔xg3! ♔h7 2.h4! gxh4+ 3.♔h3 ♔g7 4.f4+– ♔h7 5.f5 the f-pawn forces the black king to abandon his safe refuge on g7 and h7.

1.hxg3?? g4+! 2.fxg4 ½-½. With the g-pawn White is unable to disturb the black king.

11



White to move

How does White win?

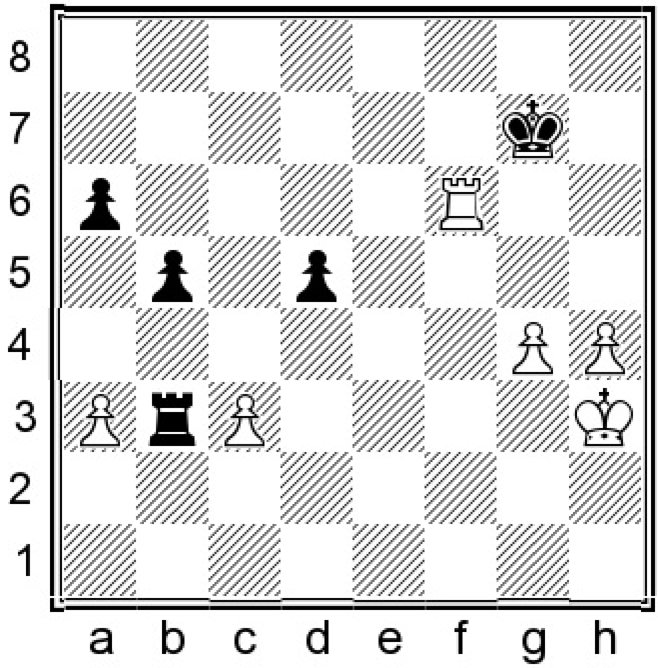
Show/Hide Solution

11
Jolanta Zawadzka 2376
Karina Horowska 2360
Chorzow ch-POL 2013

White can win easily by building a bridge. **71.♔b5?** The move in the game leads to a drawn ending of pawn against rook. White can win with 71.♖c4+! and wherever the black king goes, the rook gives another check and builds the bridge: 71...♔e5 (71...♔g3 72.♖c3+ ♔xg4 73.♖a3+– it is simple) 72.♖c5+ ♔d4!? (72...♔f4 73.♖a5 is equally simple) 73.♖c7 (73.♖a5? would let Black escape, thanks to the theme of the king on the edge: 73...♖b1+ 74.♔a3 – 74.♔a4 even loses after 74...♔c4!) 73...♔e4 74.♖f7+–; having safeguarded the g4-pawn by cutting off the black king, the white king will now be able to support the promotion of the a-pawn.

71.♔b5? ♖b1+? 71...♔g3! 72.♔b6 ♔xg4 73.♔b7 ♔f3 74.a8=♕ ♖xa8 75.♔xa8 g4=. **72.♔c6 ♖a1 73.♔b7 ♔xg4 74.a8=♕ ♖xa8 75.♔xa8 ♔f3 76.♔b7 g4 77.♖f7+ ♔e3 78.♖g7 ♔f3 79.♔c6 g3 80.♔d5 g2 81.♔d4 ♔f2 82.♖f7+ ♔e2 83.♖e7+ ♔f2 84.♖f7+ ♔e2 ½-½**

12



White to move

What is the best plan for White?

Show/Hide Solution

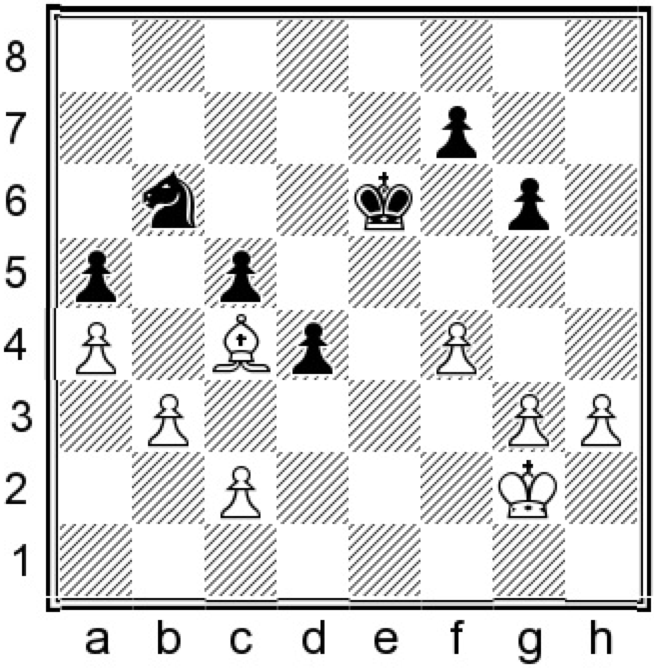
12

Daniel Alsina Leal 2536
Eduardo Iturrizaga 2656
Leon 2012 (6)

White can win by preparing to support his pair of passed pawns with his king. **52.♖xa6?** This complicates matters and finally White fails to win. Instead, he should have played 52.g5! and the active king can support the passed pawn (see **Pattern 68**) e.g. 52...♖xc3+ 53.♔g4 ♖c4+ (53...♖xa3 54.h5! b4 55.h6+ ♔h7 56.♖f7+ ♔g8 57.g6+–) 54.♔h5 ♖c8 55.♖d6 a5 56.g6 d4 57.♖d7+ ♔f6 58.♖f7+ ♔e6 59.♖f3 and the white pawns are faster.

52.♖xa6? ♖xc3+ 53.♔g2 Now the king is separated from its pawns. **53...d4** With strong counterplay, finally resulting in a draw.

13



Black to move

Should Black exchange on c4?

Show/Hide Solution

13

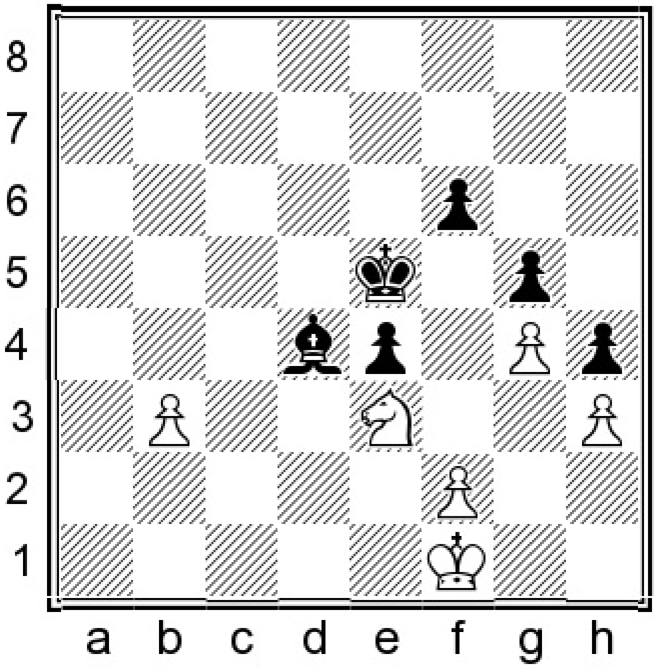
Aketza Pereyra

Leyre Abrisqueta

Barakaldo 2019 (variation)

Of course. Black exchanges the bishop and keeps the white king out: **1...♘xc4! 2.bxc4 f5! 3.g4 ♔f7 4.♔g3 ♔g7 5.h4** The other options are easier to handle: 5.gxf5 gxf5 6.♔h4 (6.h4 ♔h6) 6...♔g6=; 5.♔h4 ♔h6! 6.g5+ ♔g7= and in both cases the white king cannot enter. **5...♔h6 6.h5 gxh5 7.g5+ 7.gxf5??** even loses after 7...♔g7 8.♔h4 ♔f6 9.♔xh5 ♔xf5 10.♔h6 ♔xf4–+. **7...♔g7! 8.♔h4 ♔g6=**

14



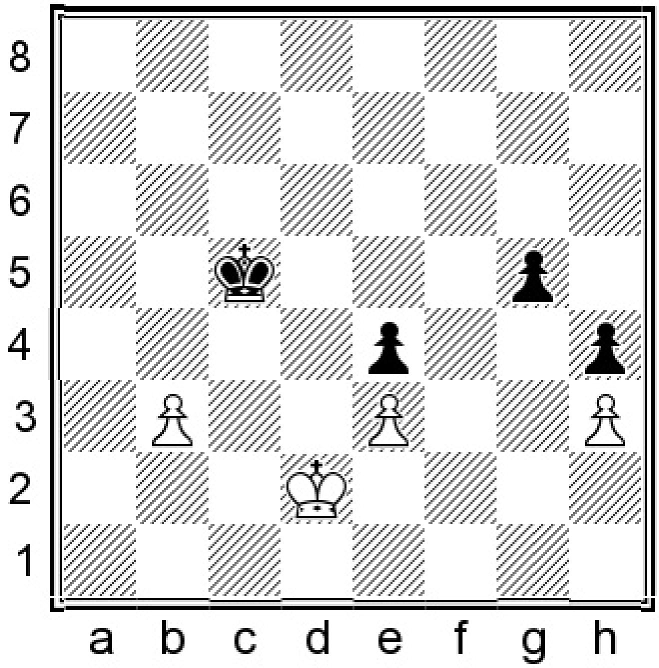
Black to move

What can Black achieve?

Show/Hide Solution

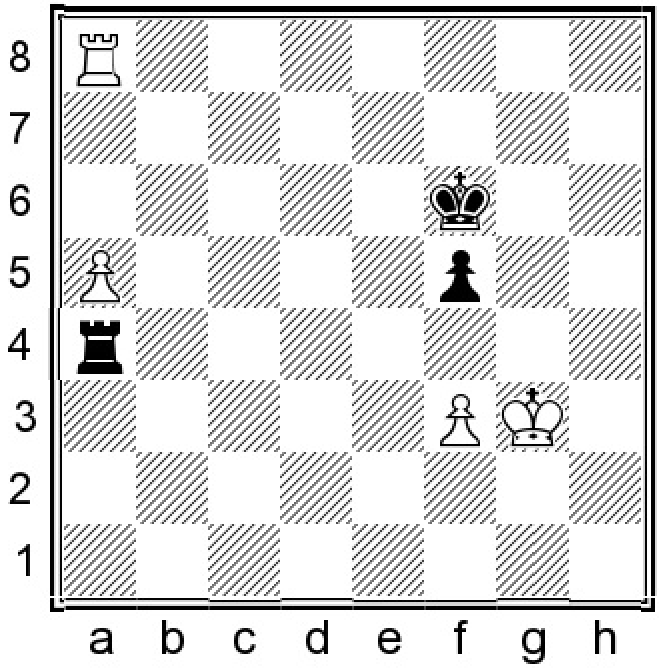
14
switchpro 2249
jangarbarek 2424
Lichess.org rapid 2020

This is a position from a rapid game, but the pattern is clear. Black can create a high-quality majority on the kingside, which is worth much more than White's distant passed pawn: **40...♗xe3! 41.fxe3 f5 42.gxf5 ♔xf5 43.♔f2 ♔e5** It only remains for the king to capture the queenside pawn. **44.♔e2 ♔d5 45.♔d2 ♔c5**



46.♔c3?! Moving his king out of the square of the h4-pawn. **46...g4! 0-1**

15



White to move

52.a6 – or is there something better?

Show/Hide Solution

15

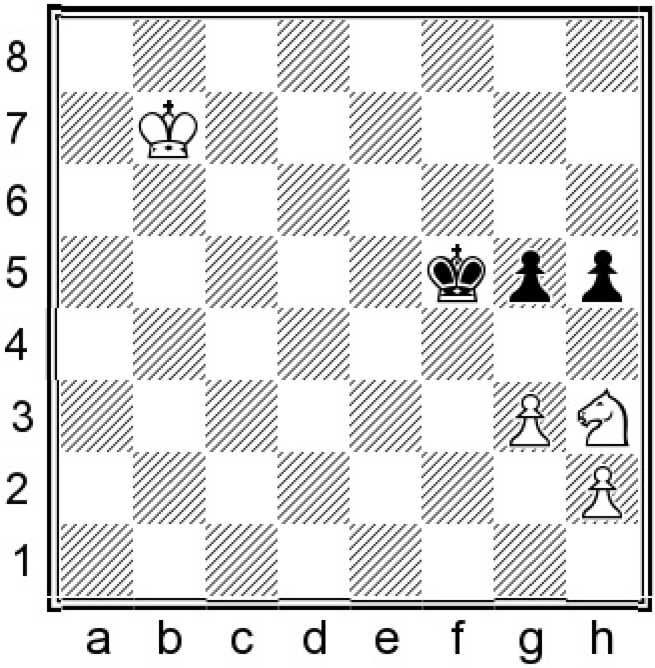
Klaus Opl 2360
Michael Gerhold 2237
Vienna ch-AUT 2010 (9)

Of course there is something better, and even necessary: first place the kingside pawn on f4.

52.a6? Instead White should have played 52.f4!+–, followed by a6-a7 and a king march to capture the f5-pawn, see **Pattern 74**.

52.a6? ♔g6? 52...f4+!=. **53.a7? ♔g7? 54.♔f2? f4!** Finally Black realises that this is the defensive structure he needs and he gained a draw on move 79.

16



Black to move

Can Black save the game?

Show/Hide Solution

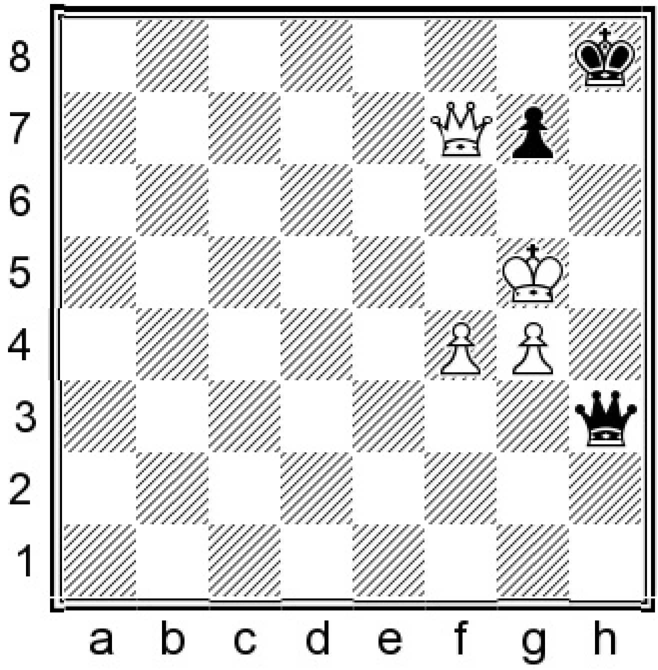
16

Robert Kempinski 2647
Maciej Klekowski 2474
Poland tt 2015

Yes, Black can hold, but not with the most obvious move, which is the one that was played in the game: **48...♔g4?** 48...h4! saves a tempo and White will not be able to defend his last pawn: 49.gxh4 gxh4 50.♔c6 ♔e4!= (only via this route, with a bodycheck; 50...♔g4? 51.♘g1 ♔f4 52.♔d5 ♔e3 53.h3 ♔f2 54.♔e4 ♔xg1 55.♔f3! wins, as in the game) 51.♘g1 ♔e3! 52.♔d5 ♔f2 and the pawn falls.

48...♔g4? 49.♘g1 h4 50.gxh4 gxh4 50...♔xh4 also ends in a version of *defence from a remote square* (**Pattern 18**): 51.♔c6 g4 52.♔d5 g3 53.h3+–. **51.♔c6** The king is very distant but arrives in time, and all because the board is very small. **51...♔f4** The black king has to make a small detour. **52.♔d5 ♔e3 53.h3!** The right moment. The knight defends the pawn as we saw in **Pattern 18.** **53...♔f2 54.♔e4 ♔xg1 55.♔f3!** – the final bodycheck, and White wins.

17



Black to move

Can Black force a draw?

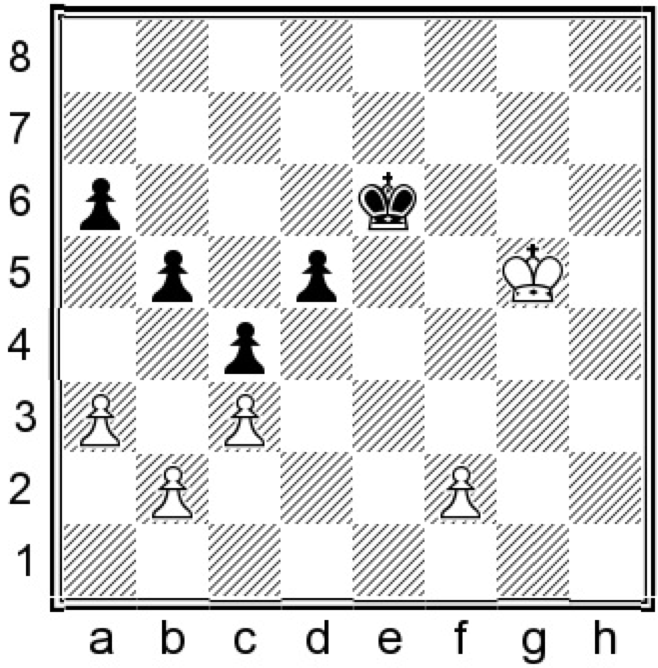
Show/Hide Solution

17

Nigel Short 2696
Vladimir Kramnik 2788
Wijk aan Zee 2010 (7)

The position is drawn in any case, but Black can cut short his suffering: **60...♕h6+! 61.♔f5** Now Black can end the game with stalemate in two ways, both very elegant, or continue to suffer a pawn down. **61...g6+!** Or 61...♕xf4+! 62.♔xf4 g5+=. **62.♔e5 ♕g5+! 63.fxg5 ½-½**

18



Black to move

Can Black win?

Show/Hide Solution

18

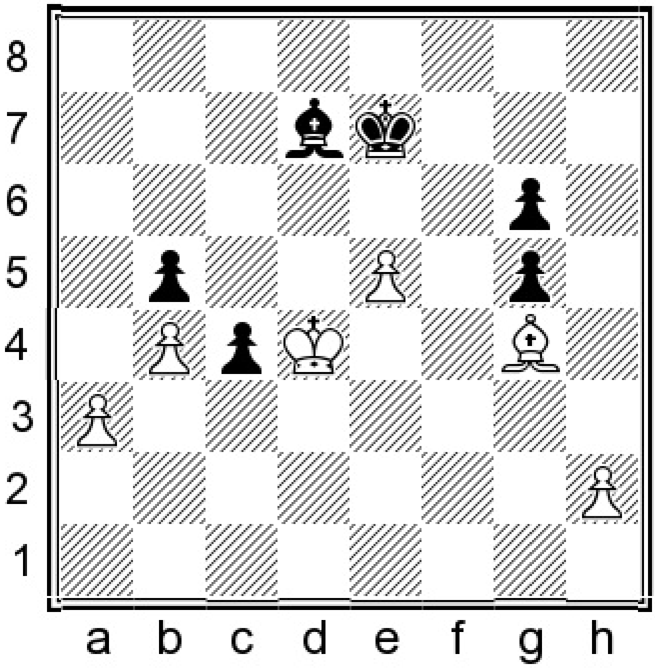
Javier Yaben 1622
Alex Arrese-Igor 1638
Pamplona 2012 (3)

Yes, the white king has strayed too far and Black can create an irresistible passed pawn by advancing his majority and making whatever pawn breaks and sacrifices prove necessary:

40...a5! The immediate 40...d4! also wins on this occasion.

40...a5! 41.♔f4 41.f4 ♔f7 42.♔f5 d4 43.cxd4 b4 44.♔e4 b3! (a typical mechanism, preventing the white king from entering the square of the b3-pawn) 45.♔e3 c3–+. **41...d4 42.cxd4 b4 43.axb4 c3!** The typical finesse. **44.bxc3 a4** and the only surviving black pawn queens: **0-1**

19



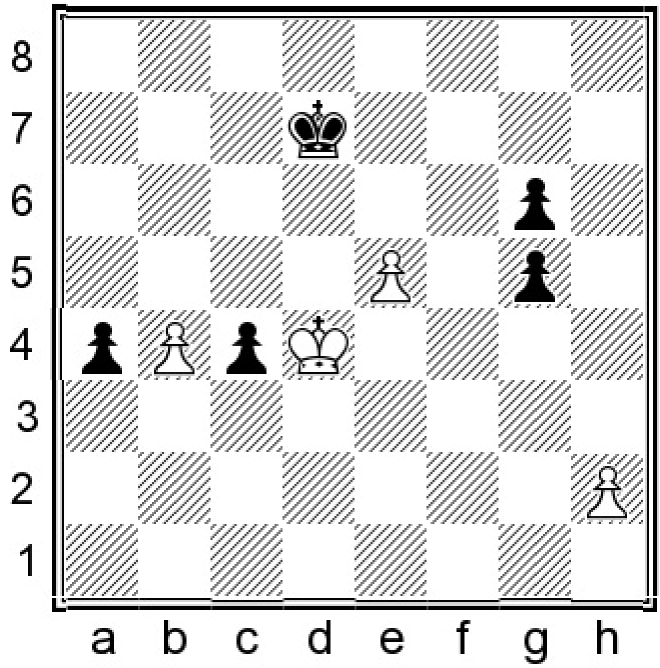
White to move

Does White win by exchanging bishops?

Show/Hide Solution

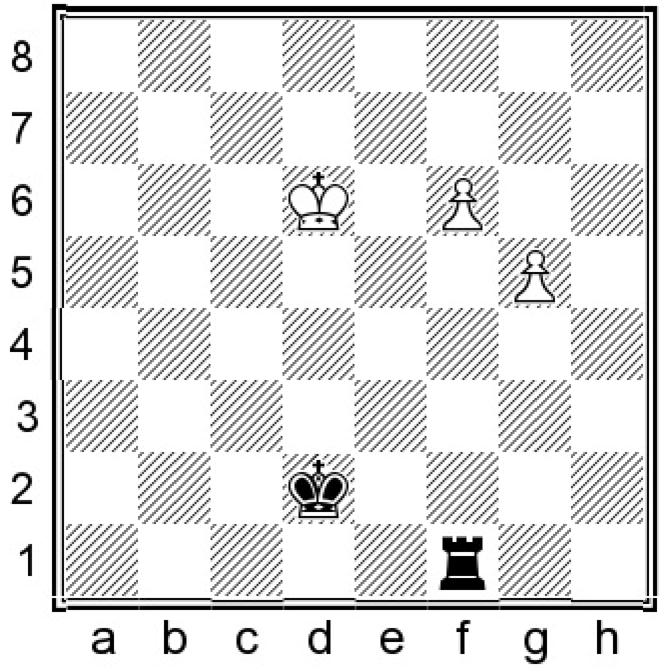
19
Jesus de la Villa
Gillerme Genro
Zaragoza 2018

57.♗xd7! Yes, White can win by exchanging the bishops, with accurate calculation and using the principle that, with two separated passed pawns, one of them will queen if the *floating square* which they form reaches the back rank. **57...♔xd7 58.a4! bxa4**



59.b5! Both white pawns are on the fifth rank and their floating square reaches the back rank. Instead, 59.♔xc4, intending to go after the a4-pawn, also wins. **59...a3 60.♔c3 g4 61.b6 1-0**

20



Black to move

Can Black save the game?

Show/Hide Solution

20
Igors Rausis 2512
Atanu Lahiri 2361
Dhaka 2009 (6)

Black can save the game, if right from the start he heads for the *tail-hook*: **64...♖f5?** Forgetting the type of position in which a single pawn beats a rook. Black draws with 64...♔e3! 65.♔e7 ♔f4! 66.g6 ♔f5! 67.g7 ♖g1 68.♔f7 ♔e5, the *tail-hook*.

64...♖f5? 65.♔e6! ♖xg5 66.f7 ♖g6+ 67.♔e5 ♖g5+ 68.♔e4 ♖g4+ 69.♔f3 ♖g1 70.♔f2 1-0

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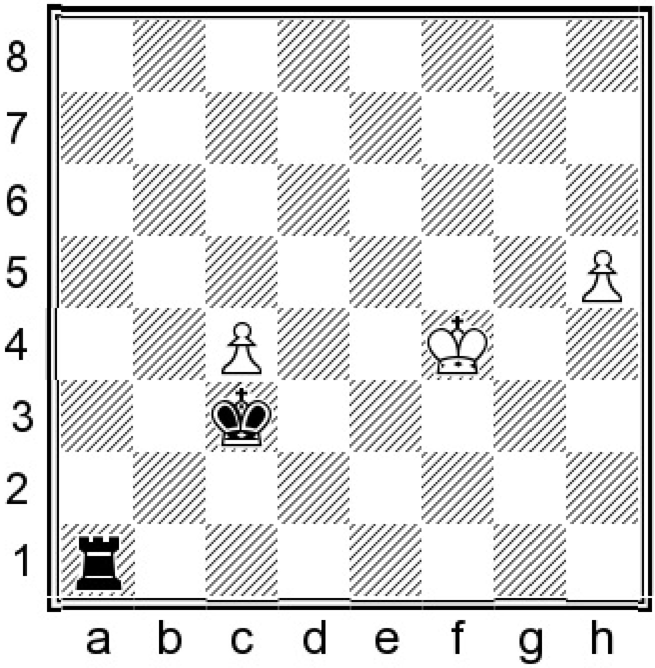
21



Black to move

58...♔xc4, or is there something better?

Show/Hide Solution

21

Alberto Leal

Rubens Filguth 2350

Mexico 1978 (6)

The only important pawn is the one supported by the king. Now the c4-pawn is expendable. **58...♔xc4?** An error, both in calculation and understanding. The unaccompanied pawn presents no danger and the tempo lost allows White to reach a well-known drawn position.

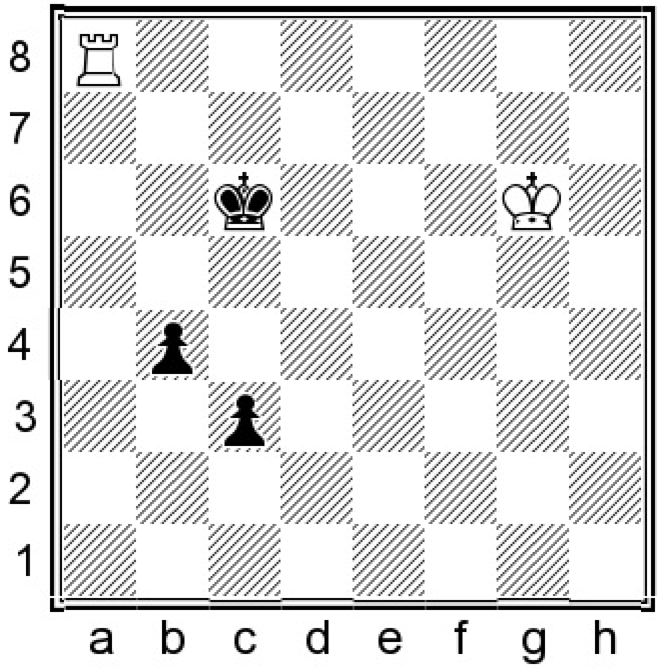
58...♖h1! 59.♔g5 ♔d4! 60.♔g6 ♔e5 61.h6 (61.c5 ♔e6 62.c6 ♖g1+ 63.♔h7 ♔f7) 61...♔e6 62.h7 (62.c5 ♖g1+ 63.♔h7 ♔f7; 62.♔g7 ♔e7 63.h7 ♖g1+ 64.♔h8 ♔f7 65.c5 ♖e1–+) 62...♖g1+ 63.♔h6

♔f7 64.h8=♘+ ♔f6 65.♔h7 ♖c1 66.♔g8 ♖xc4 67.♔h7 ♖g4–+;

58...♔d4 was also correct.

58...♔xc4? 59.h6 ♔d5 60.♔f5 ♖f1+ 61.♔g6 ♔e6 62.♔g7 ♖g1+ 63.♔f8! ♖f1+ 64.♔g7 ♖f7+ 65.♔g8? 65.♔g6 would have drawn, but only if White answers 65...♖f1 with 66.♔g7!, as 66.h7?? loses after 66...♖g1+. **65...♔f6 66.h7 ♖g7+ 0-1**

22



Black to move

How does Black win?

Show/Hide Solution

22

Arshak Petrosian

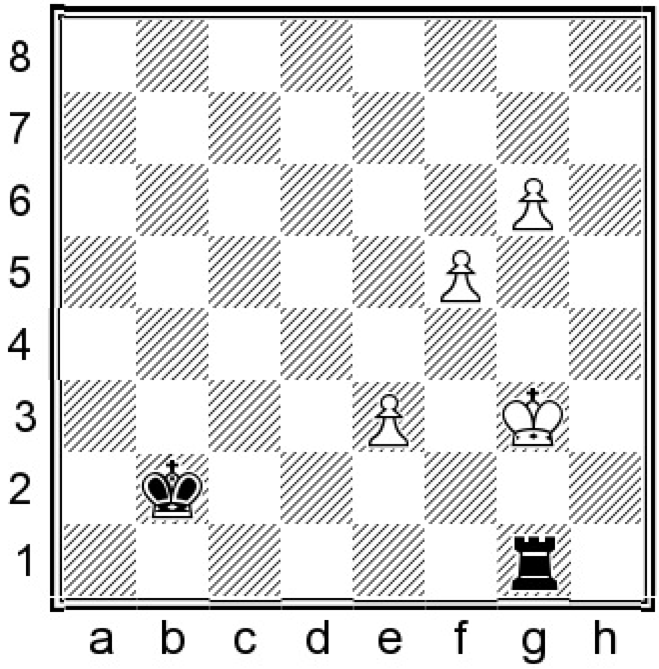
Vitaly Tseshkovsky

Minsk 1976

Black misses various chances to win, but the simplest one is on the first move here: **56...♔d5?!** 56...♔d7! 57.♔f5 c2 wins. The pawns are already far enough advanced to win on their own. All that is required is to prevent the rook from getting behind the c-pawn.

56...♔d5?! 57.♔f5 The players agreed a draw here – curious, because Black is still winning: 57...b3! 58.♖d8+ ♔c5! (58...♔c4 59.♔e4 b2 60.♖c8+ ♔b3 61.♖b8+ ♔c2 62.♔d4) 59.♖c8+ ♔d4 60.♖d8+ ♔e3 61.♖e8+ ♔d2 62.♖d8+ ♔c1–+.

23



White to move

Can White win?

Show/Hide Solution

23

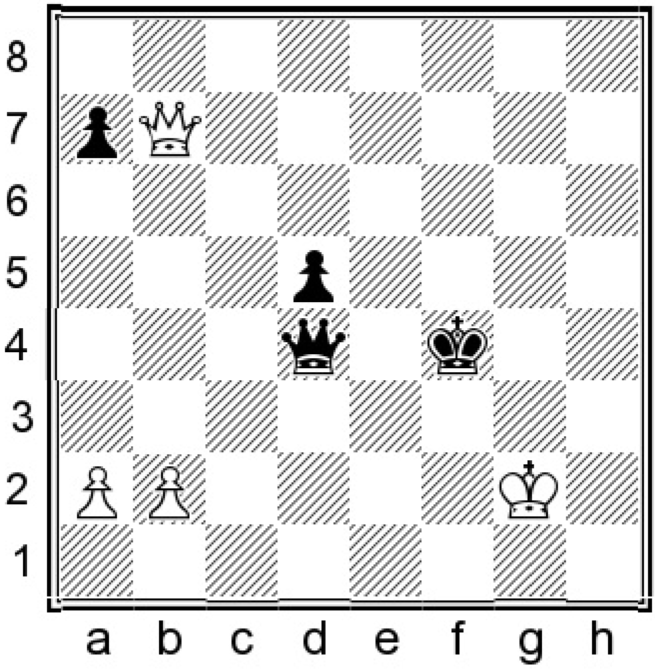
Igor Shvyrjov 2470
Timo Paakkonen 2282
Tallinn 2012 (6)

White can win, but must choose the right direction to send his king: **55.♔f4?** 55.♔h2! (it is all about harassing the rook, so that the pawns can win on their own) 55...♖g5 56.e4 ♔c3 57.f6 ♖xg6 58.e5 ♔d4 59.f7 and the rook is unable to stop the pawn;

55.♔f2! also wins but in a more complicated way: 55...♖g5 56.e4 ♔c3 57.♔e3 ♔c4 58.♔f4 ♖g1 59.♔e5 ♔c5 60.♔e6 ♔d4 61.e5 ♔e4 62.♔f6 ♖f1 63.g7 ♖xf5+ 64.♔g6 ♖f1 65.e6 and a pawn queens.

55.♔f4? ♔c3 56.♔e5 ♔d3 57.e4 ♔e3! 57...♖g4? was the game continuation: 58.f6 ♖xg6 59.f7 ♖g4 60.f8=♕+–. **58.f6 ♖g5+!** and with this famous check Black stops the three pawns.

24



Black to move

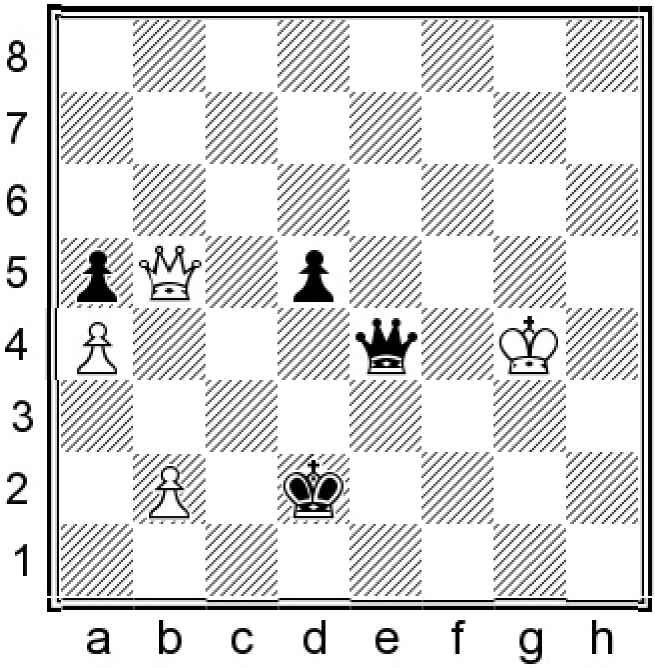
Can Black win?

Show/Hide Solution

24

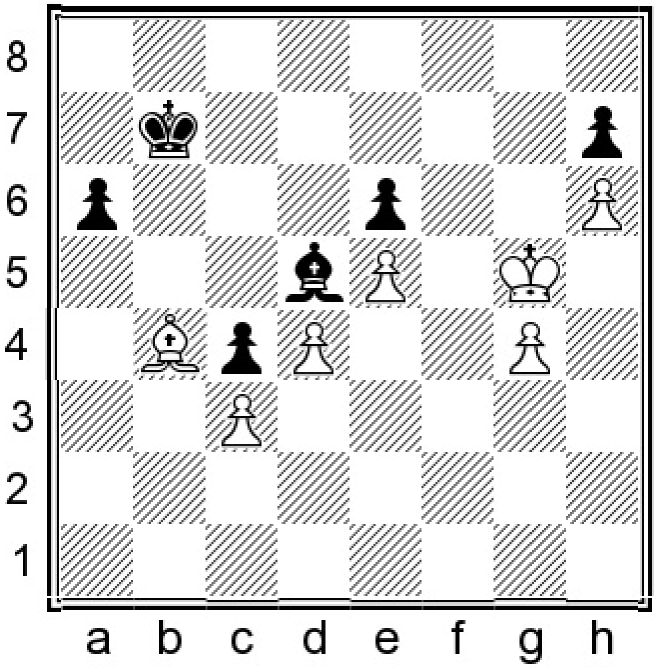
Alexandre Vuilleumier
Jesus de la Villa
Llucmajor 2015

Black can ensure victory with his passed pawn by bringing his king under *the shield* of the white pawns: **42...♔e3! 43.♔h3 ♔d2 44.a4 a5?** 44...♕e3+!, followed by the advance of the pawn, wins, e.g. 45.♔g2 d4 46.♕xa7 ♔e2! 47.a5 ♕f3+ 48.♔h2 d3 and Black combines the advance of his pawn with threats of mate. **45.♕b5 ♕d3+ 46.♔g4! ♕e4+**



47.♔g5? The king tries to move away from the checks, but this concept is not useful here, and it was much better to keep the king close by for its nuisance value: 47.♔g3!=. **47...d4 48.♕xa5+ ♚e2?** A second chance. The king should have headed for the natural shield of the b2-pawn; after 48...♔c2! 49.♕b4 ♔b1! once again the more advanced passed pawn prevails, because the king has hidden behind the enemy pawns and helped to make way for the pawn. Now if 50.a5 ♕e3+ 51.♔f6 d3 wins easily. **49.♕b5+=**

25



Black to move

Can Black save the game?

Show/Hide Solution

25

Aimer del Carmen

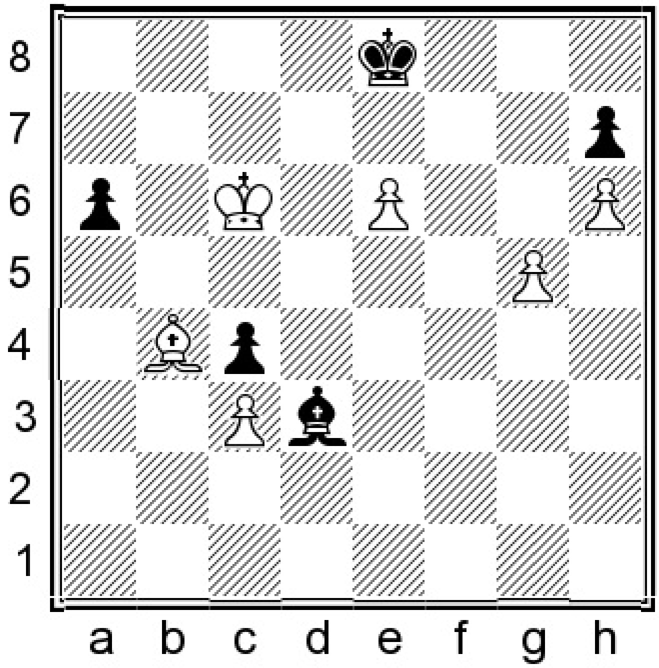
Martin Pascual

Pamplona 2020

54...♗f3!! On the surface it seems that this move is merely intended to target the g-pawn *(pawns in the crosshairs)*, but first and foremost it is a matter of trying to prevent the pawn break on g6. The game continued 54...♔c6? 55.♔f4!+– and now it is not possible to prevent g5-g6;

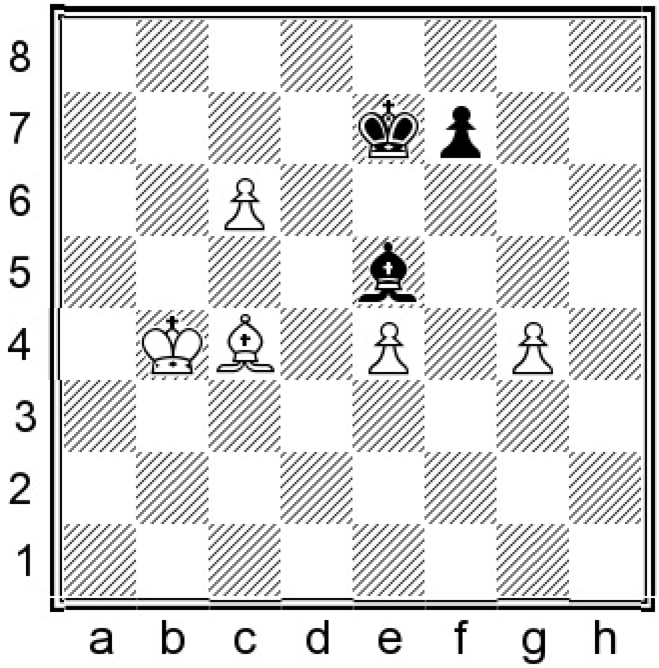
also after 54...♔c7!? 55.♔f4! ♗c6 56.d5! exd5 57.e6 ♔d8 58.♔e5 ♗e8 59.♔xd5 ♗g6 60.♔xc4 Black would have too many pawns to deal with.

54...♗f3!! 55.d5 If 55.♔f4 ♗e2, followed by ...♗d3. **55...exd5 56.e6 ♔c7 57.♔f4 ♗e4 58.♔e5 ♔d8 59.g5 ♗d3 60.♔xd5 ♔e8 61.♔c6**



61...♗f5! Again targeting the pawn *(pawns in the crosshairs)*. **62.e7 ♗g6 63.♔b6 ♔d7 64.♔xa6 ♗d3=**, with a fortress.

26



White to move

Can White win?

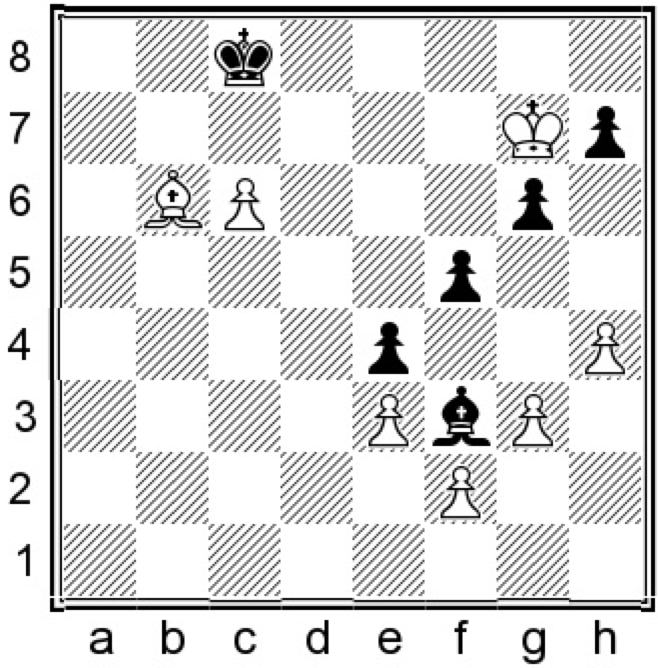
Show/Hide Solution

26
Analysis
2020

1.♗xf7! Sacrificing the bishop is the easiest plan. I must admit that, when I chose this position as an exercise, I thought that the sacrifice on f7 was the only way to win, but there is second winning plan, which is as subtle and instructive as the other one: 1.♔c5!? f6 2.♔b6 ♔d8 3.♔c5 ♔e7 4.♔d5 ♗c7 5.♗d3 (5.♗b5 ♗b8 6.e5? ♗xe5 7.g5 ♗b8 8.g6 f5) 5...♗f4 6.e5 ♗xe5 7.g5 ♗c7 8.g6+–.

1.♗xf7! ♔xf7 2.♔b5 ♗c7 3.♔a6 ♔e7 4.♔b7 ♔d8 5.g5 and the bishop cannot cope with the three pawns, especially the two distant passed pawns.

27



Black to move

Can Black save the game?

Show/Hide Solution

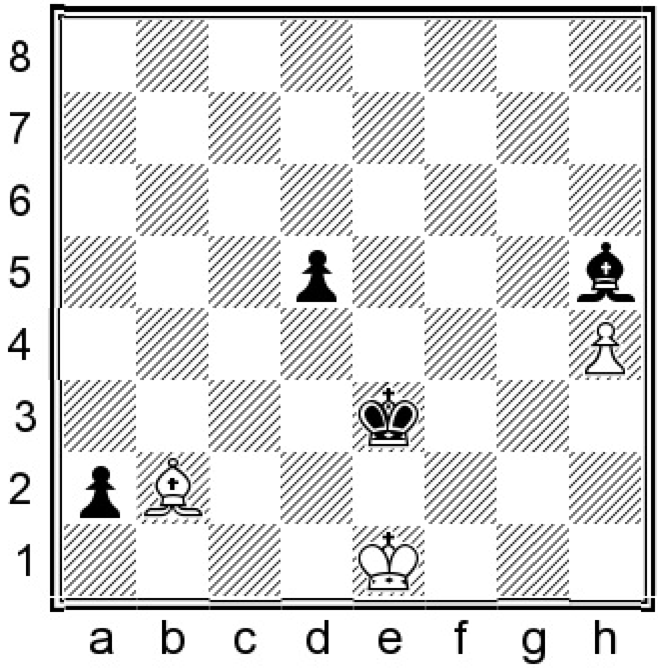
27

Pawel Traczyk 1847
Sebastian Malec 1800
Ursus 2006 (5)

Black can construct a fortress, but must start with his first move: **47...♗g4?** 47...h5! 48.♔xg6 ♗g4 (fortress) 49.♔f6 ♗h3 50.♔e5 ♗g4 51.♔d6 ♗h3 52.♔e5 ♗g4=.

47...♗g4? 48.♔xh7 ♗h5 Black must have thought that this was a fortress too, but White can breach it. **49.♔h6 ♔b8 50.♔g5 ♔c8 51.g4 fxg4** 51...♗xg4 52.♔xg6 and the h-pawn will cost Black the bishop. **52.♔f4 g3** Sooner or later, this move had to be made. **53.fxg3 ♗f3 54.♔g5 ♗h5 55.g4** and Black resigned.

28



White to move

Can White save the game?

Show/Hide Solution

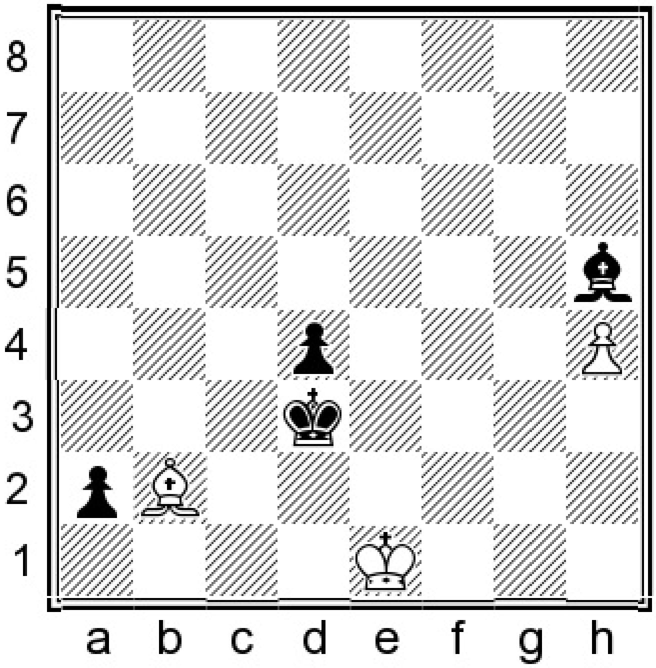
28

Dimitri Reinderman 2608

Erwin l'Ami 2620
Eindhoven 2010

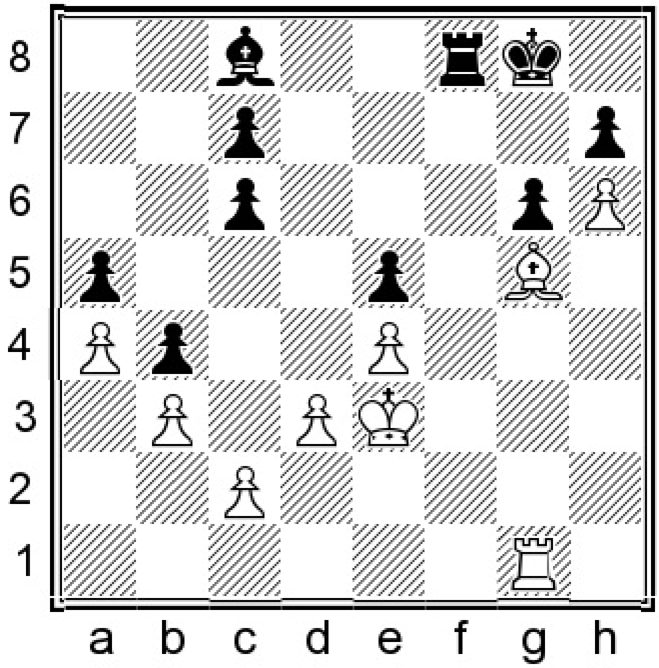
White's position seems desperate, but there is a solution: **77.♗c1+!** and the black king must step in front of the d-pawn or else allow the white king to go to d2. Instead, 77.♗a1? d4 78.♗b2 d3 79.♗c1+ d2+ 80.♗xd2+ ♔d3 loses.

77.♗c1+! ♔d3 Or 77...♔e4 78.♗b2 d4 79.♔d2!=. **78.♗b2 d4** 78...♔c2 79.♗f6 ♔b1 80.♔d2 a1=♕ 81.♗xa1 ♔xa1 82.♔d3=.



79.♔f2! White's bishop cannot move because then the black king would go to e3. **79...♗g4 80.♔e1 ♗e2 81.♔f2 ♗d1 82.♔e1 ♗h5 83.♔f2 ♔e4 84.♔e1 ♔e3 85.♗c1+! ♔d3 86.♗b2 ♗g4 87.♔f2 ♗h5 ½-½**

29



Black to move

Is 32...♔f7 the correct move??

Show/Hide Solution

29

Hikaru Nakamura 2829

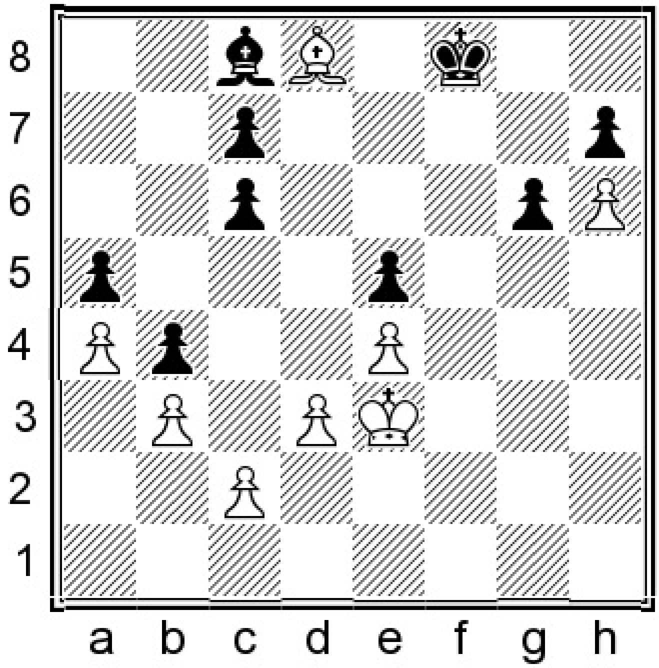
Magnus Carlsen 2881

Magnus Carlsen Chess Tour Finals 2020

The black position is uncomfortable, but it appears tenable with waiting tactics.

32...♔f7? 32...♗d7 33.♖g2 ♗c8 34.♖f2 ♖e8 35.♖f6 ♗e6 36.♗h4 ♗d7.

32...♔f7? 33.♖f1+ ♔e8 34.♖xf8+ ♔xf8 35.♗d8

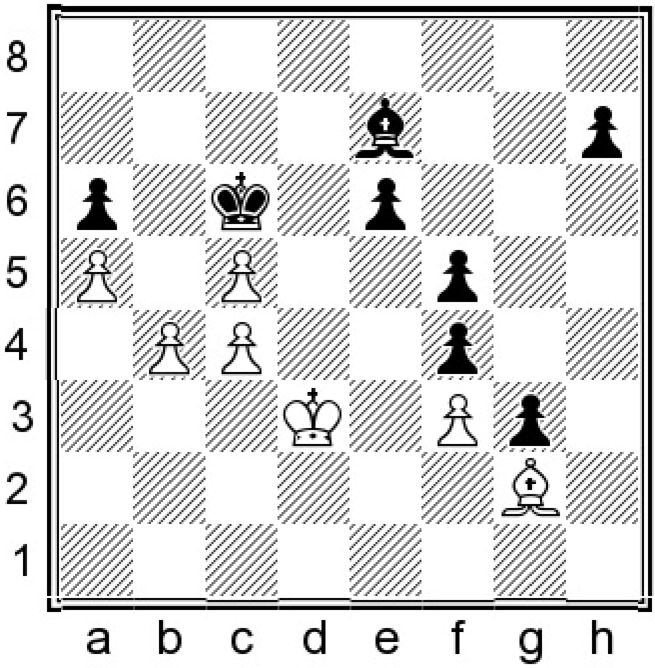


and the ending is lost, as the black pawns are now falling, one after another:

35...c5 35...♔f7 36.♗xc7 ♔e6 37.♗xa5 c5 38.♗c7 ♗b7 39.a5 ♗c8 40.♔f3 ♗b7 41.♔g4 ♗a6 42.♔g5 ♗c8 43.♗b6 and Black is faced with a decision between two definite evils: either the white king reaches g7 via the f6-square, or two more pawns will fall on the queenside. **36.♗xc7 ♔e7 37.♗xe5 ♔d7 38.♗f6 ♗b7 39.♔f4**

Black resigned. Either the white king will enter via the e5-square or the bishop will gain access to d8 and carry on capturing black pawns.

30



Black to move

Can Black win?

Show/Hide Solution

30

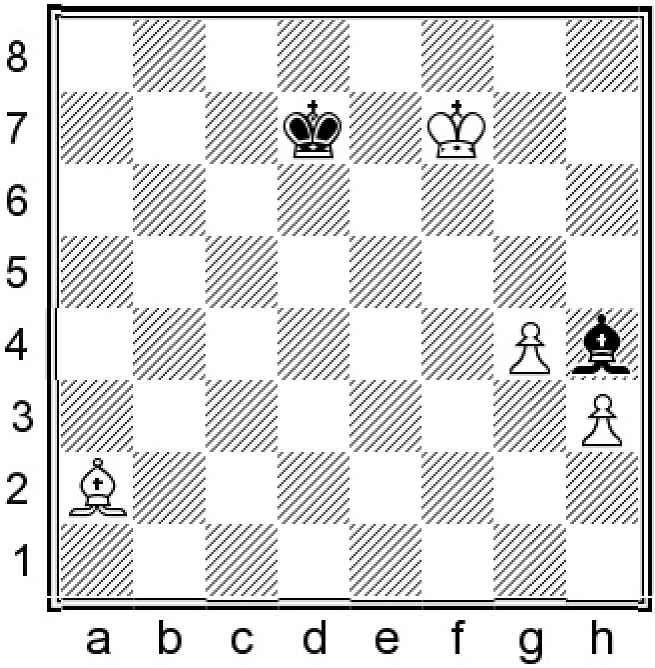
Joaquin Scarpa 2260

Diego Herman 2120

Argentina 1997 (variation)

32...♗xc5!? This move is really ingenious, but it is not enough to win against correct defence. **33.b5+!** The capture of the bishop loses, because Black will eventually obtain another passed pawn on the a-file: 33.bxc5? ♔xc5 34.♗h3 h5 35.♗g2 h4 36.♗h3 e5! (36...♔b4? is premature in view of 37.♔d4 ♔xa5 38.♔c5) 37.♗g2 ♔b4 38.♔e2 ♔xa5 39.♗h3 ♔b4 40.♗xf5 a5–+. **33...axb5 34.cxb5+ ♔xb5 35.♗h3 ♔xa5 36.♗g2** Leading essentially to the game position, analysed in **Pattern 39: ½-½**

31



Black to move

Can Black save the game?

Show/Hide Solution

31

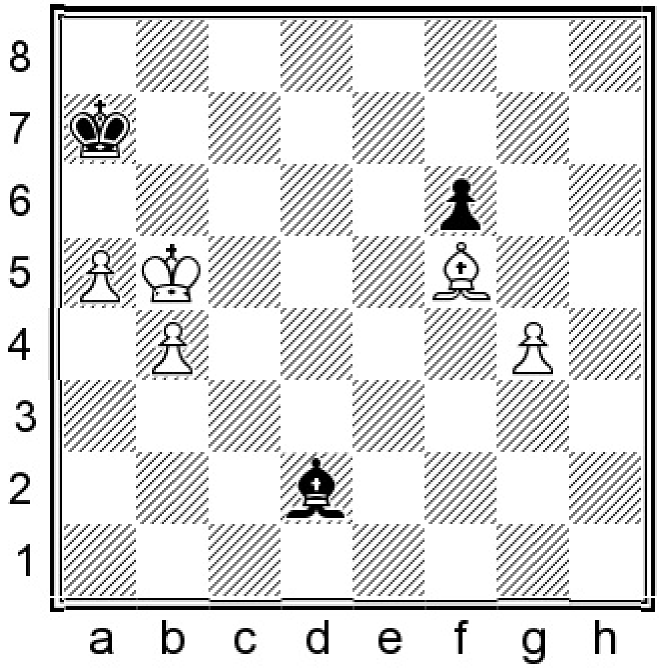
Vladimir Kramnik 2810

Levon Aronian 2809

London ct 2013 (5)

Black can save himself by preparing *lateral control* with his king: **63...♔d6!! 64.♔g6 ♔e5 65.♔h5 ♗e7 66.g5 ♔f4! 67.h4 ♔g3!** Excellent defence. The pawns are unable to advance. 68.♗c4 68.g6 ♗f8 69.♔g5 ♗e7+ 70.♔f5 ♗f8 71.h5 ♔h4=. **68...♗f8!** 68...♗d8? loses to 69.g6 ♗f6 70.♗f1 – zugzwang, but only for Black. White could always get this position. **69.♗e2 ♗g7 70.♗c4 ♗f8 71.g6 ♔f4! 72.♗a2 ♗g7 ½-½**

32



Black to move

Can Black save the game?

Show/Hide Solution

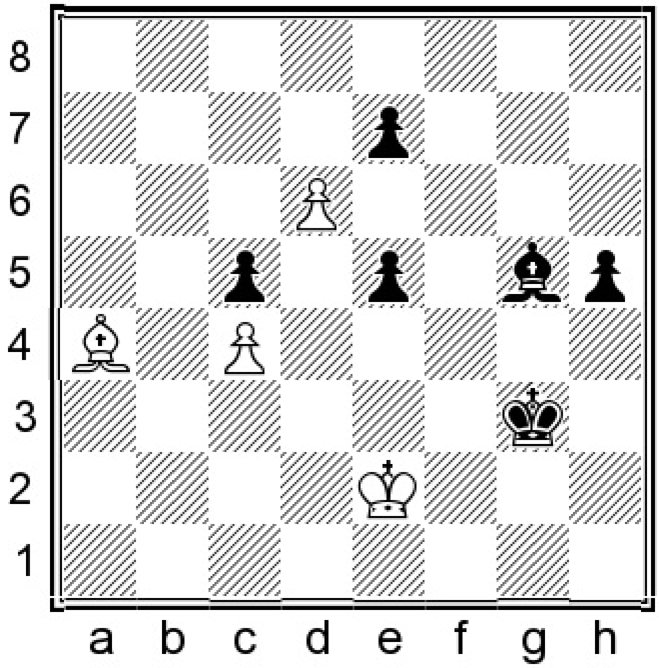
32
Erik Andersen
Erik Lundin
Copenhagen 1937 (2)

Black can save the game if he immediately takes steps to exert *lateral control*.

53...♗e1?? It was necessary to play 53...♔b7 54.♗e4+ ♔c7 55.♔a4 ♗e1 56.b5 ♔d6! 57.b6 ♔c5! and by employing the typical manoeuvre, the black king manages to exert lateral control.

53...♗e1?? 54.♗e4 ♗d2 55.♔a4 1-0 There is no way to prevent b5-b6. and the sacrifice of the bishop is not sufficient in this case.

33



Black to move

Can Black win?

Show/Hide Solution

33

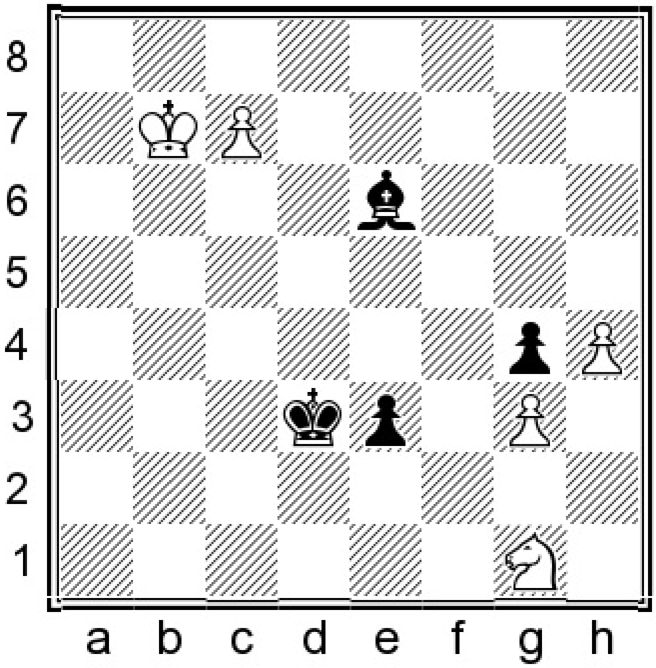
Mikhail Steinberg
Mark Dvoretsky
Minsk 1964 (variation)

White has decided to give up his useless pawn prematurely, and Black can ignore it:

14...♔f4! 14...exd6? would have justified White's move, as by playing 15.♗e8 h4 16.♗c6! he can set up a perfect *zonal defence* to control Black's three mobile pawns.

14...♔f4! 15.d7 15.♗c6 e4 transposes. **15...e6 16.♗c6 e4** and the zonal defence has been breached; Black wins.

34



White to move

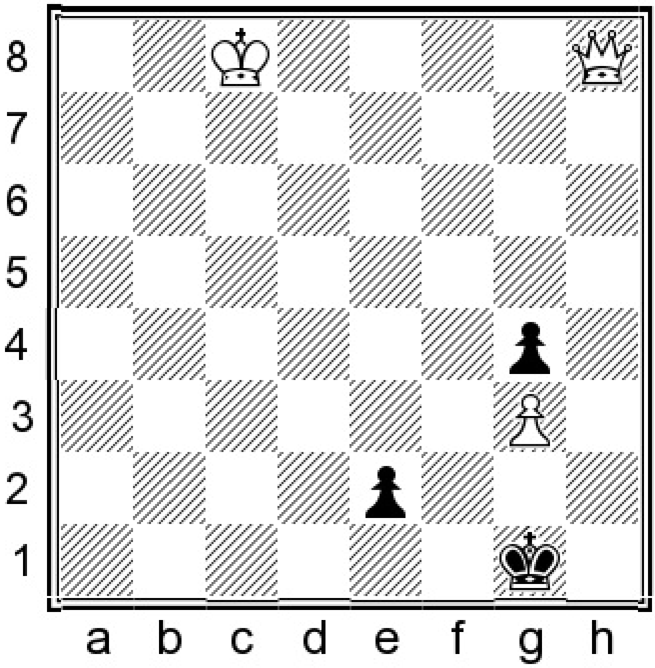
Should White queen right away or not?

Show/Hide Solution

34
Dao Thien Hai 2601
Chanda Sandipan 2543
Kolkata 2004 (5)

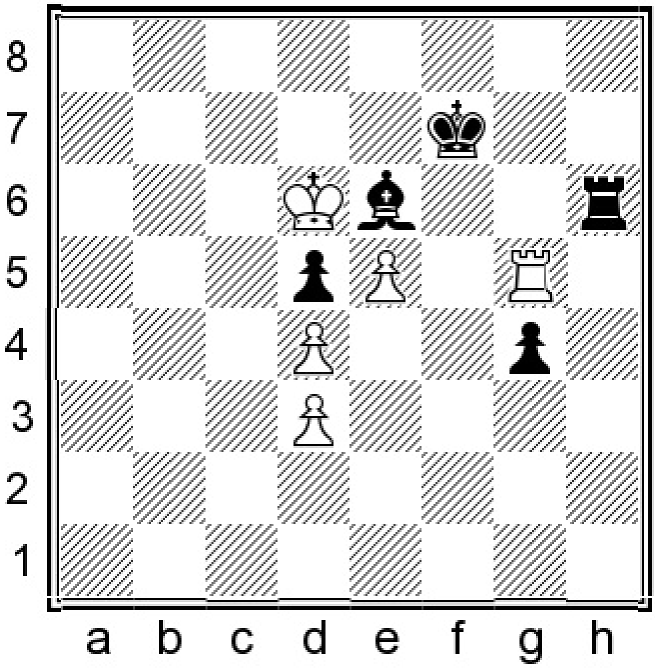
With the correct division of labour it would not even be necessary to calculate. The knight will sacrifice itself for the e3-pawn and the two pawns will overwhelm the black bishop. But White commits a whole cascade of errors: not applying the division of labour, calculating when unnecessary, faulty evaluation of the resulting ending... and he fails to win: **58.c8=♕??** 58.h5! ♔d2 59.h6+–.

58.c8=♕?? ♗xc8+ 59.♔xc8 ♔d2 60.h5 ♔e1 61.h6 ♔f2 62.h7 ♔xg1 63.h8=♕ e2



This is a draw, because the obstacles on the g-file prevent the white queen from carrying out the winning manoeuvre.

35



Black to move

Does 61...♖g6 win?

Show/Hide Solution

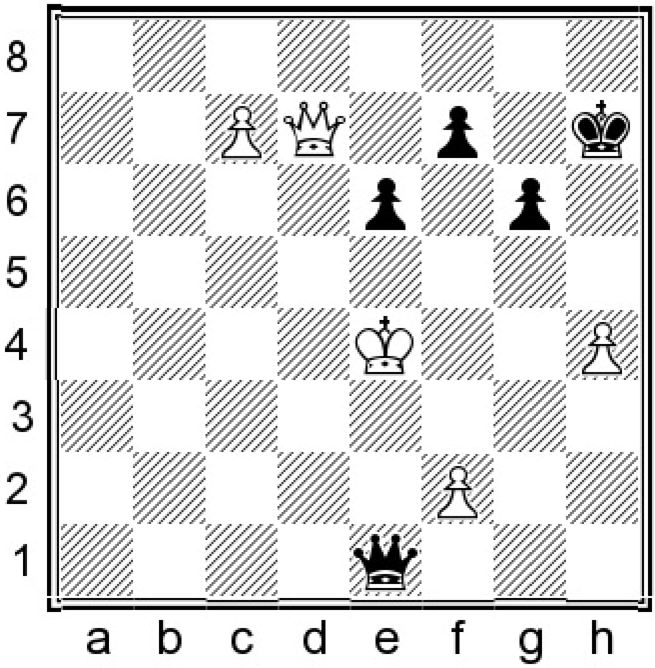
35

Zoltan Nemeth 2364
Viktor Vass 2218
Budapest 2002 (9)

No, a bit of patience was needed: **61...♖g6??** 61...♖h8–+.

61...♖g6?? 62.♖xg6 ♔xg6 63.♔xe6 g3 64.♔d7 g2 65.e6 g1=♕ 66.e7 The d-pawns on the d-file are an obstacle for the black queen. **66...♕g4+ 67.♔d8 ♕g5 68.♔d7 ♕f5+ 69.♔d8 ♕f6 70.♔d7 ♕f7 71.♔d8 ♔f5** The logical attempt, but there are two pawns which need to be captured. **72.e8=♕ ♕xe8+ 73.♔xe8 ♔f4 74.♔e7 ♔e3 75.♔e6 ♔xd4 76.♔d6 ½-½**

36



White to move

Can White escape perpetual check?

Show/Hide Solution

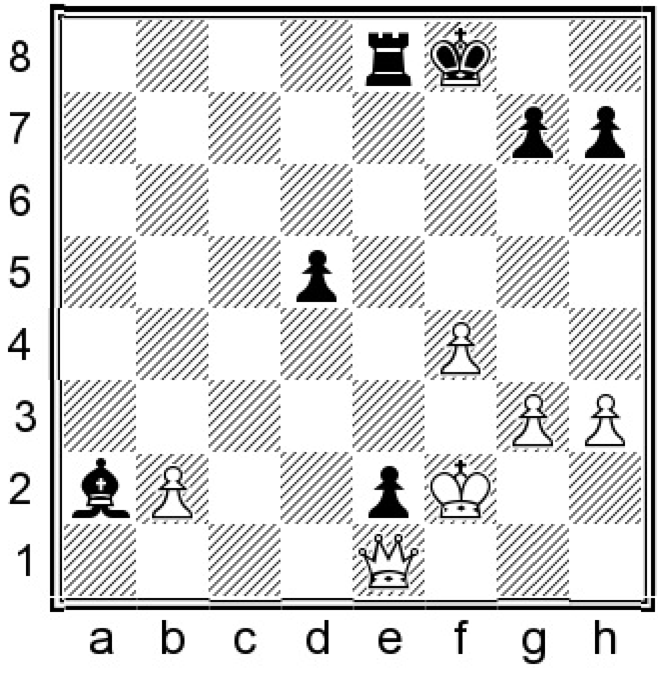
36

Juan Labiano 2081
Pedro Zambudio 1755
Benidorm 2019

Yes, White can evade the perpetual check, with a well-known technique: **65.♔f3!** This forces the queen to change direction. In the game, White escaped, but with help from his opponent: 65.♔f4? ♕xf2+ 66.♔e5 ♕g3+?? (66...♕b2+! 67.♔d6 ♕b4+ 68.♔c6 ♕a4+ achieves perpetual check) 67.♔f6 ♕xh4+ 68.♔xf7+–.

65.♔f3! ♕h1+ 66.♔e2 ♕e4+ 67.♔d2 and now the king escapes to the queenside, where from d7 the queen limits Black's checks: **67...♕b4+ 68.♔c2** Or 68.♔d3 ♕b3+ 69.♔e2 ♕c2+ 70.♔f3 ♕f5+ 71.♔e3 ♕c5+ 72.♔d3 ♕a3+ (72...♕f5+ 73.♔c4 ♕c2+ 74.♔b5 ♕b3+ 75.♔a6 ♕a2+ 76.♔b7) 73.♔e2 ♕b2+ 74.♔f3 ♕b3+ 75.♔g2+–. **68...♕c4+ 69.♔b2 ♕b4+ 70.♔a2 ♕c4+ 71.♔a3 ♕c3+ 72.♔a4 ♕c4+ 73.♔a5 ♕c5+ 74.♔a6 ♕c4+ 75.♔b6 ♕b4+ 76.♕b5+–**

37



Black to move

What can White achieve?

Show/Hide Solution

37

Javier Nicolas Zapata 2179

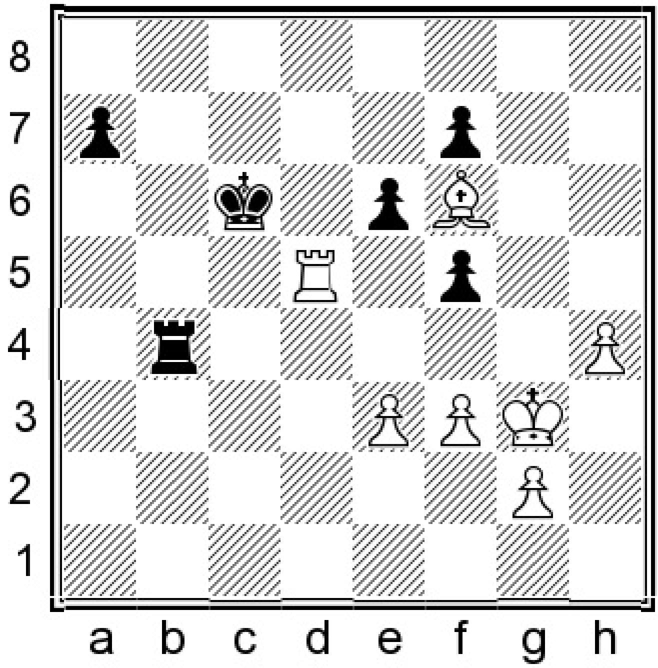
Alvaro Ramirez Aguado 1833

Valdepeñas 2019

White is about to change blockaders (see **Pattern 97**). The only thing Black needs to do is not allow this. **36...♗c4?** After 36...♔f7! the white queen is unable to leave the e1-square and Black will win by advancing the d-pawn, or else by defending the e2-pawn with the bishop and then breaking the blockade with the rook.

36...♗c4? 37.♕b4+ ♔f7? 37...♔g8 38.♔e1 ♖a8 39.♔d2 ♖a1 40.♕b8+=. **38.♔e1!** White has blockaded with the king and now he can win.

38



Black to move

35...exd5 or 35...♔xd5 ?

Show/Hide Solution

38

Thomas Schlager

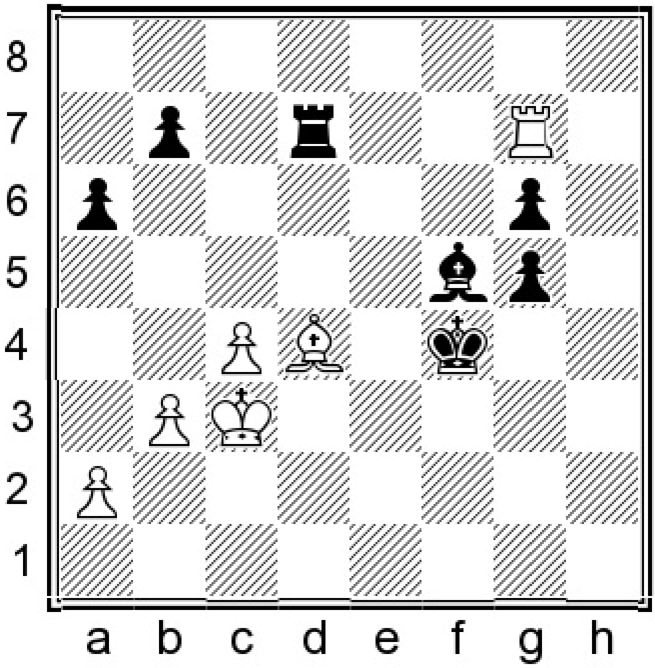
Hartmut Kohl
Endingen 1987 (9)

Black must seek counterplay, since the h-pawn is very dangerous: **35...♔xd5?** 35...exd5! is the correct move, because it will allow Black to create a passed pawn on the d-file: 36.h5 f4+! 37.exf4 d4! (Black creates counterplay with his most advanced passed pawn. From now on the roles played by both kings are extraordinary) 38.h6 d3 39.♔f2 ♖b1! 40.♔e3 ♖h1 41.♗g7 a5 42.♔xd3 a4 43.♔c4 a3 44.♔b3 ♔d5 45.♔xa3 ♔e6 46.g4 f6 (in one move the black king will reach f7 and the rook will be at liberty to capture pawns) 47.g5 fxg5 48.fxg5 ♔f5=.

35...f4+! first also works.

35...♔xd5? 36.h5! Now there is no way to stop the awkward pawn. **36...e5** 36...♖b1 37.h6 ♖h1 38.♗h4!+–. **37.h6 ♔e6 38.h7 ♖b8 39.h8=♕ ♖xh8 40.♗xh8 f6 41.♔f2 a5 42.♔e2 a4 43.♔d2 f4 44.e4 f5 45.♔c3 fxe4 46.fxe4 1-0**

39



Black to move

Should Black exchange the rook?

Show/Hide Solution

39

Peter Svidler 2758

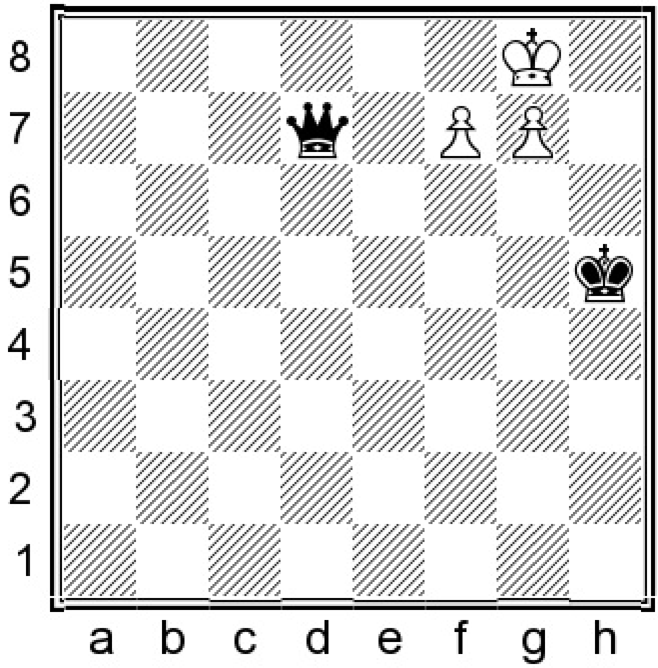
Sergey Karjakin 2766

Khanty-Mansiysk 2014 (8)

This was a trick question. Black should indeed exchange his rook, but for the enemy bishop, and then continue with two very precise moves: **64...♖xd4!!** 64...♖xg7 is not enough to win: 65.♗xg7 g4 66.♔d2 ♔f3 67.♔e1 g3 68.♔f1 and the white king is able to blockade.

64...♖xd4!! 65.♔xd4 b6! Also necessary. **66.♔c3!? ♔e3! 67.♖b7 g4 68.♖xb6 g3 69.♖d6 g2 70.♖d1 g5 71.b4 ♔f2 72.a4 g1=♕ 73.♖xg1 ♔xg1 74.b5 axb5 75.axb5 g4! 76.c5 g3 77.c6 g2 78.b6 ♔f2 79.b7 g1=♕ 80.b8=♕ ♕c1+! 81.♔d4 ♕e3+! 82.♔c4** 82.♔d5 ♗e6+ 83.♔d6 ♕f4+ 84.♔xe6 ♕xb8 85.♔d7 ♕b5!–+. **82...♗e6+! 0-1**

40



Black to move

Can Black win?

Show/Hide Solution

40

Pablo Ricardi 2415
Alejandro Hoffman 2390
Buenos Aires 1988

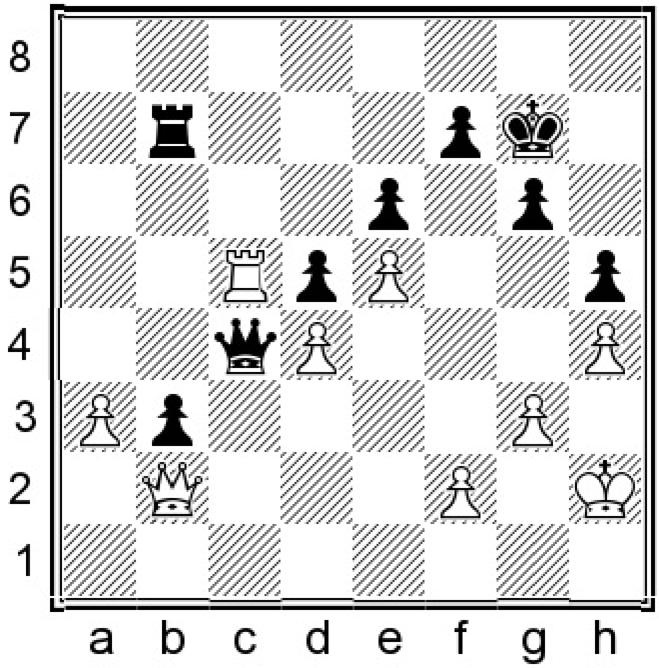
Of course, and very easily, as long as you do not allow a fork: **68...♕e6?** Black should have played 68...♔h6! 69.f8=♕ ♔g6 with zugzwang – mate cannot be prevented;

but not 68...♔g6?? 69.f8=♘+! and White wins.

68...♕e6? 69.♔f8 ♕h6 70.♔e8 ♕e6+ 71.♔f8 ♕d6+ 72.♔e8 ½-½

Show in Text Mode

41



Black to move

How does Black force the win?

Show/Hide Solution

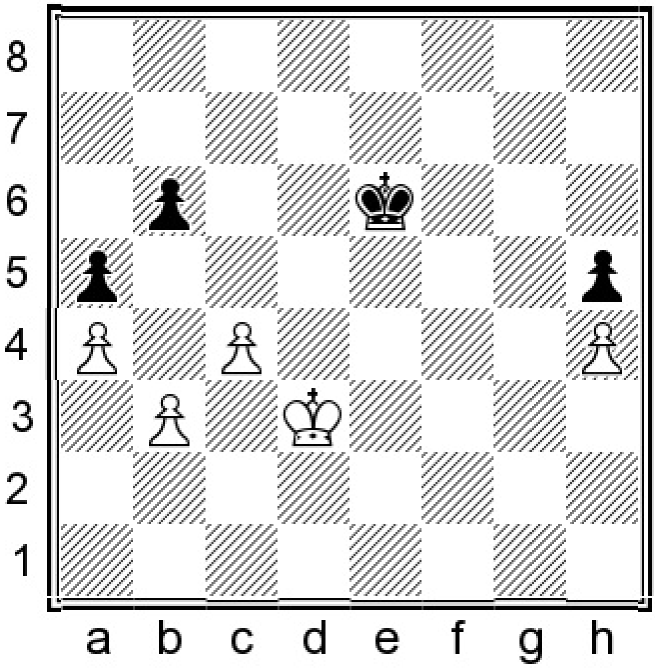
41

Anton Fridh 2255
Hans Ek 2355
Lund 1974 (3)

Black wins by force by compelling his opponent to capture the queen and create a second passed pawn:

43...♖b5! 44.♖xc4 dxc4 45.a4 45.d5 c3! 46.♕xc3 b2 47.dxe6 b1=♕ 48.e7 ♖b8? 49.e6+ f6–+. **45...♖b8 46.d5 c3 47.♕xc3 b2 48.♕f3 b1=♕ 49.♕f6+ ♔h6 50.♕f4+ ♔g7 51.♕f6+ ♔g8 52.dxe6 ♕f5 53.e7 ♕e6 54.a5 ♖e8 0-1**

42



Black to move

What is the correct result?

Show/Hide Solution

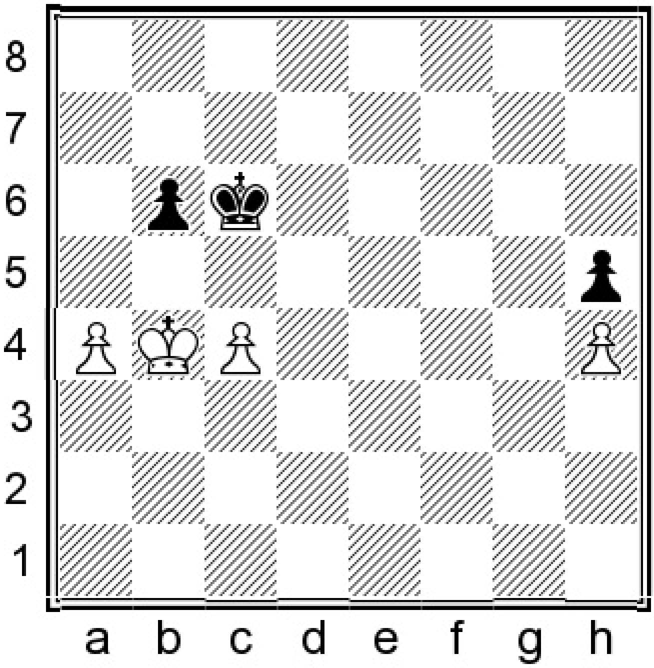
42

Michael Adams 2685

Joel Lautier 2620

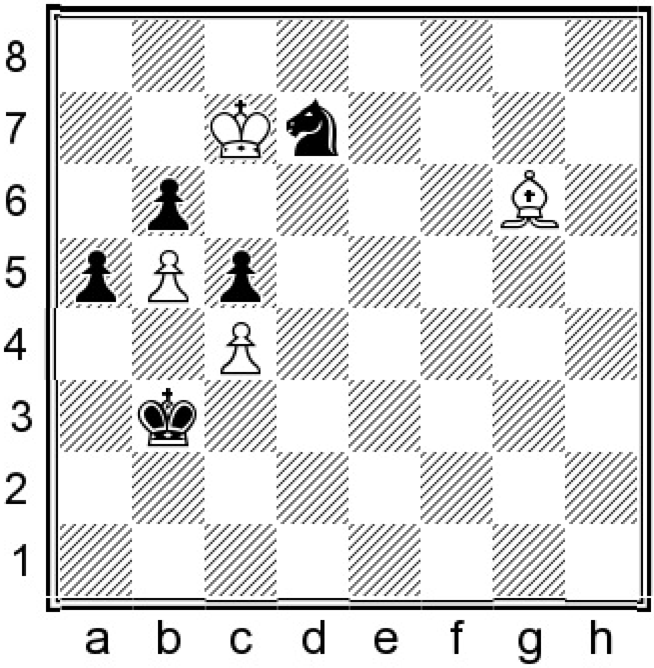
Tilburg 2016 (8)

The correct result is a draw by immediately applying the distant opposition: **48...♔d7! 49.♔c3 ♔c7 50.b4 axb4+ 51.♔xb4 ♔c6 52.♔b3 ♔d6 53.♔c2 ♔c6 54.♔d3 ♔d6 55.♔c3 ♔c5 56.♔b3 ♔d6 57.♔b4 ♔c6**



58.c5 bxc5+ 59.♔c4 ♔b6 60.♔d5 ♔a5 61.♔xc5 ♔xa4 62.♔c4 ½-½

43



White to move

Can White save the game?

Show/Hide Solution

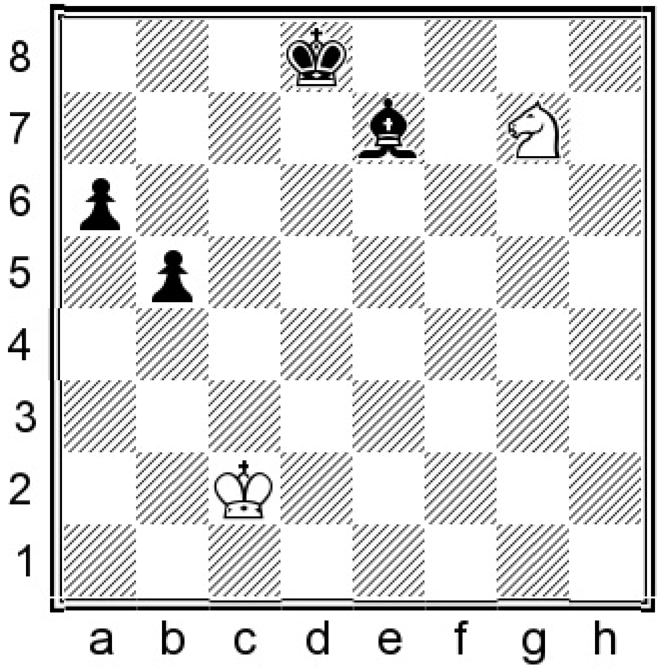
43

Vakil Fakhrutdinov
Vladimir Shuvatkin
Nabereznye Chelny 2010

Of course White can save the game, but not trivially: he must allow his opponent to queen the a-pawn, but in the game he played the natural **65.♔xd7?**. Instead, 65.♗e8!! draws, e.g. 65...a4 66.♗xd7 a3 67.♔xb6 a2 68.♔c7 a1=♕ 69.b6=.

65.♔xd7? a4 66.♗b1 a3 67.♔c6 ♔b2 and Black won; the bishop cannot remain on the short diagonal.

44



Black to move

Is 51...a5 a good move?

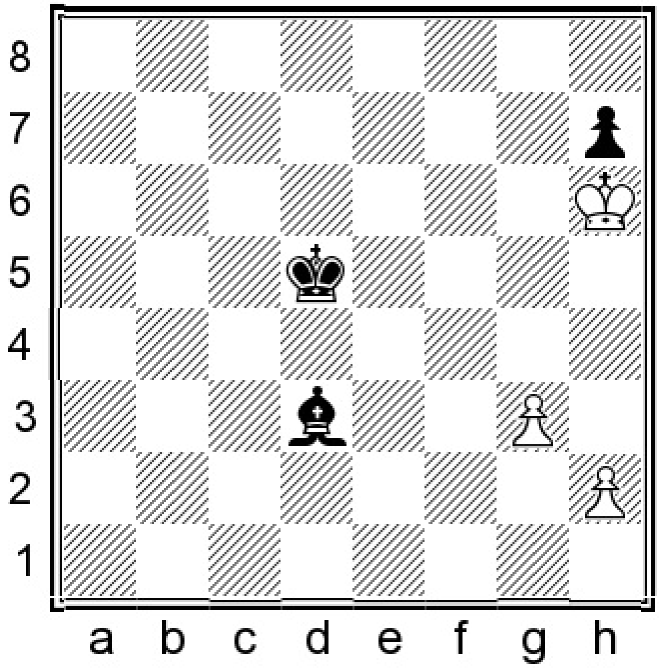
Show/Hide Solution

44
Ljubomir Vranic 2170
Mila Soklovacki 1835
Senta 2016

51...a5? is premature. First bring the king closer: 51...♔c7!–+.

51...a5? 52.♘e6+ ♔d7 53.♘d4 b4 54.♔b3! Setting up the blockade. **54...♗c5 55.♘c2 ♔c6 56.♔a4** The control resulting from 56.♔c4 is also effective: 56...♗e7 57.♘e1=. **56...♗b6 57.♘a1!** Excellent, although ♘e1 also draws: 57.♘e1 ♔c5 58.♘d3+ and now White can give up the knight for the two pawns or else achieve a typical stalemate with 58...♔c4 59.♘xb4. **57...♔c5 58.♘b3+ ♔c4 59.♘c1 ♗c7 60.♘b3 ♗b6= ½-½**

45



White to move

Does White draw?

Show/Hide Solution

45
Konstantin Orlov 2222

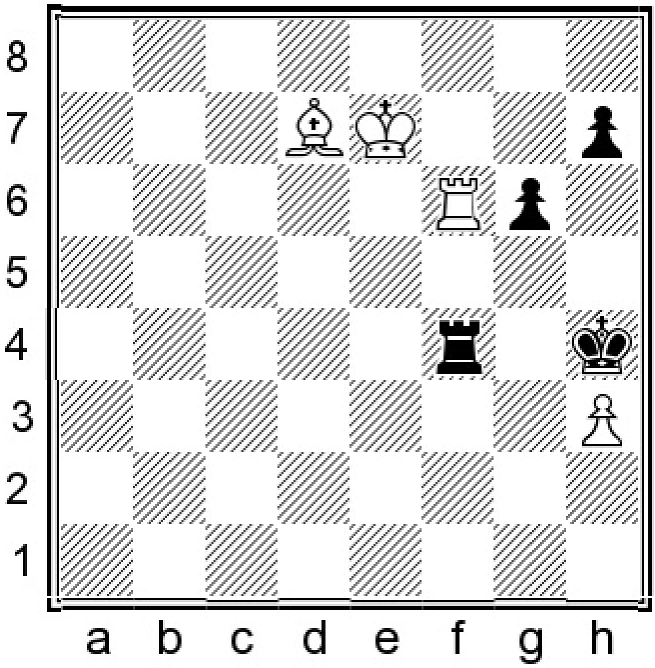
Muhammad Khusenkhojaev 2398
St Petersburg 2015 (6)

If White is familiar with the idea of sacrificing the bishop and prevents it, he can indeed draw:

51.g4? 51.h4! ♔e5 52.h5! and there is no time to reach the winning set-up, because now the black king cannot access the f4-square.

51.g4? ♔e5! 52.h4 ♔f4! 53.g5 ♗g6! 54.h5 ♔f5! 0-1

46



Black to move

Should Black exchange rooks?

Show/Hide Solution

46

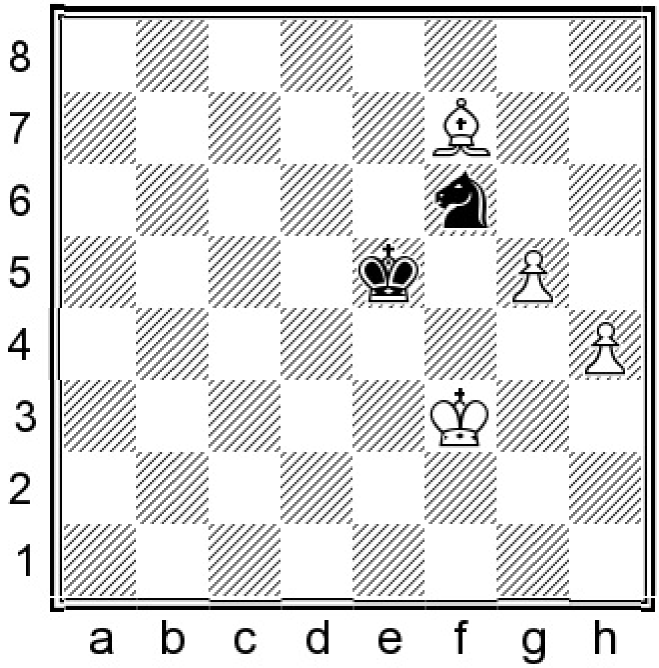
Alexander Kovchan 2569
Dmitry Shchukin 2344
St Petersburg 2011 (3)

Black exchanged rooks to hasten the draw, but it proved to be an error caused by impatience:

49...♖xf6? With 49...♖b4! Black should be able to hold.

49...♖xf6? 50.♔xf6 g5 51.♗g4! h5 52.♔f5! 1-0

47



White to move

Which of these wins? 58.g6, 58.gxf6, 58.h5, 58.♔g3 or 58.♗g6 ?

Show/Hide Solution

47

Guillermo Garcia 2335
Lubomir Kavalek 2625
Las Palmas 1974 (8)

Of the five suggested moves, only one wins. The theme of the wrong rook's pawn is known even to beginners, but the list of grandmasters who have been caught out by it is very long.

58.g6?

A) The other pawn advance does not win either: if 58.h5? ♔f5!=;

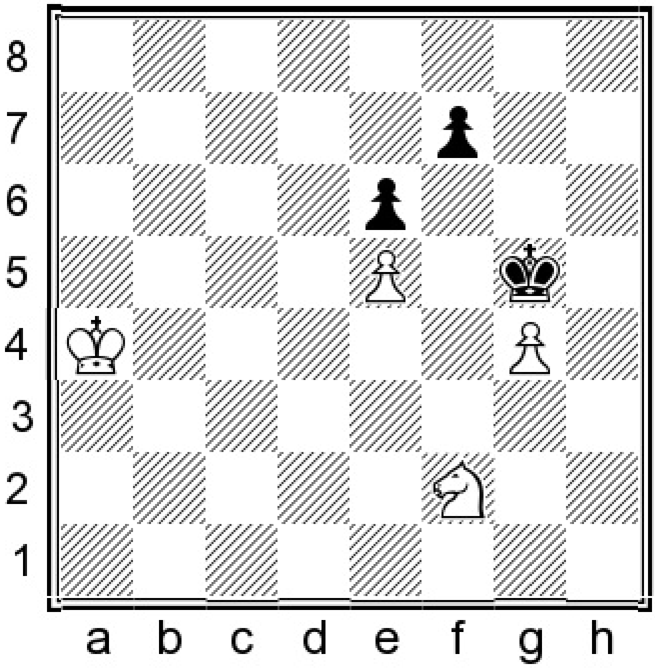
B) If 58.♔g3? ♔f5! and White cannot prevent ...♘e4 and ...♘xg5 or ...♘h7 and ...♘xg5;

C) If 58.gxf6? ♔xf6=;

D) But patience would be rewarded: 58.♗g6! prepares h4-h5 and after 58...♔e6 59.h5 ♔e5 60.h6, followed by h6-h7, wins.

58.g6? ♔f5 59.g7 It seems very simple, White is going to continue with h5-h6 and h6-h7 but he did not expect **59...♘g8!!**. The knight's final jest. Now it almost seems as if the previous moves were just to lull White into a false sense of security. The g-pawn falls and it is a draw.

48



White to move

Can White win?

Show/Hide Solution

48

Aron Nimzowitsch

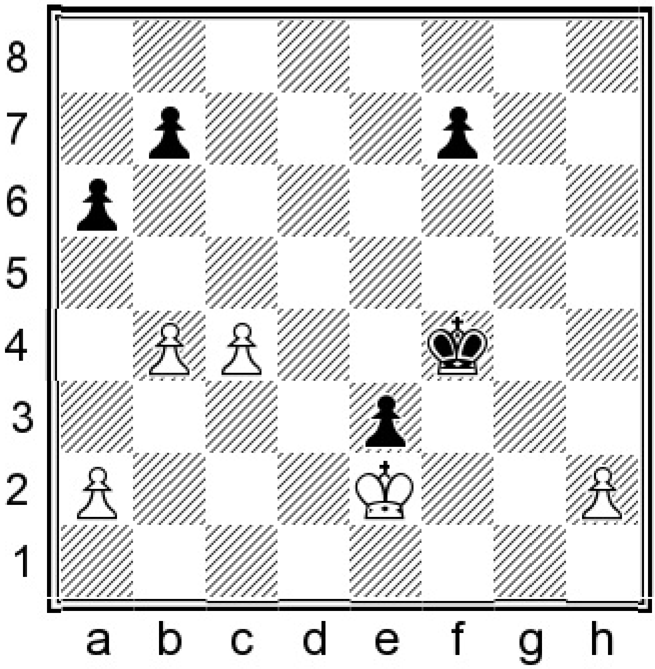
Akiba Rubinstein

Karlsbad 1911 (6)

The knight needs to reach d7, but there is no need to hurry. White should wait until the black king comes to f4 to attack the e5-pawn. **51.♘d3?** Allowing Black's reply. Instead, 51.♔b4! ♔f4 (51...f6? 52.♘e4+) 52.♘d3+ ♔xg4 53.♘c5! ♔f5 54.♘d7 wins.

51.♘d3? f6! 52.exf6 ♔xf6 53.♘f2 ♔g5 Now the pawn arrives to harass the knight, just in time. **54.♔b4 e5 55.♔c4 e4 56.♔d4 ♔f4 ½-½**

49



White to move

What can White achieve?

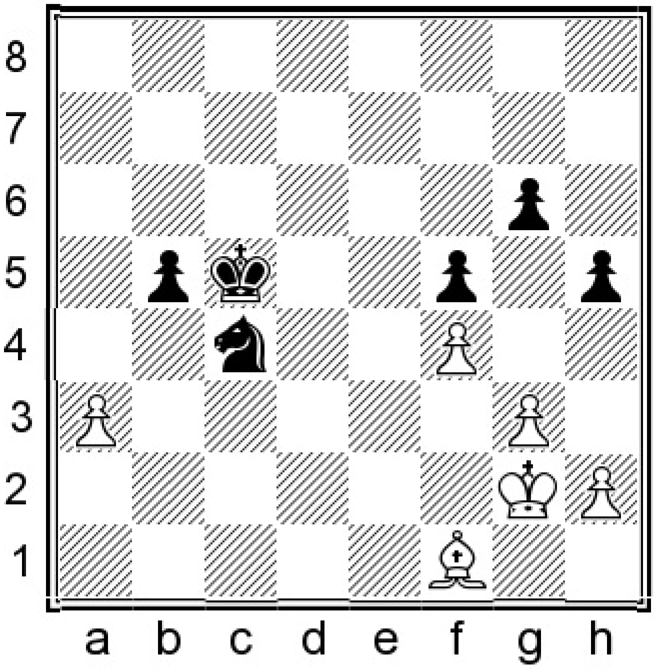
Show/Hide Solution

49

Jesus de la Villa
Txema Ingunza
Sanxenxo 2010

White wins, as long as he calculates the manoeuvres of Black's king and pawns accurately: **41.h4!** First it is essential to prevent the black king from moving to e4; now he has no time. **41...f5 42.h5 ♔g5** 42...♔e4 43.h6 f4 44.h7 f3+ 45.♔e1 and Black is a tempo short to mate with the two pawns on the seventh. **43.c5** Now White needs to create another passed pawn, widely separated from the h-pawn. 43.b5 also wins. **43...♔xh5 44.a4 f4 45.b5 axb5 46.axb5 ♔g4 47.c6 bxc6 48.b6!** Now it is necessary to queen on the right square for giving check. **48...f3+ 49.♔xe3 ♔g3 50.b7 1-0**

50



White to move

Can White save the game?

Show/Hide Solution

50

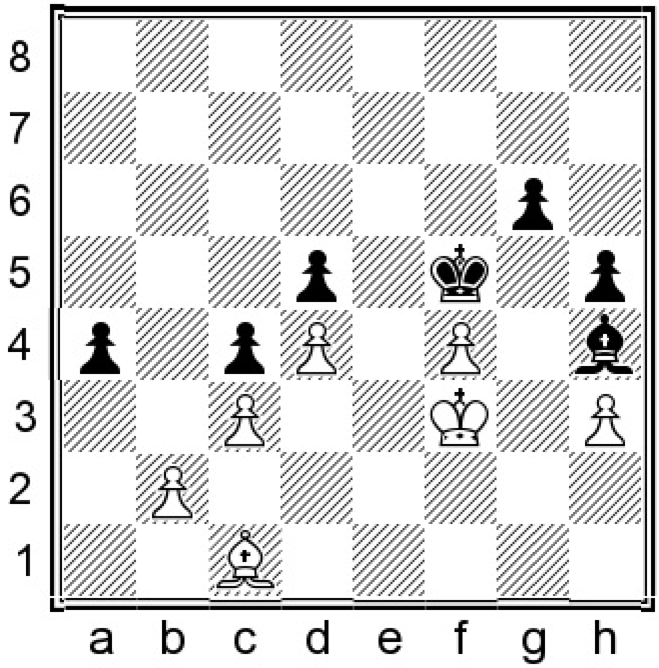
Henrique Mecking

Boris Spassky

Palma de Mallorca 1969

White saves the game with a precise counterattack: **38.♔h3! ♘xa3 39.♗xb5! ♘xb5 40.♔h4 ♘d4 41.♔g5 h4 42.gxh4 ½-½**

51



Black to move

Is there a way to breach the white position?

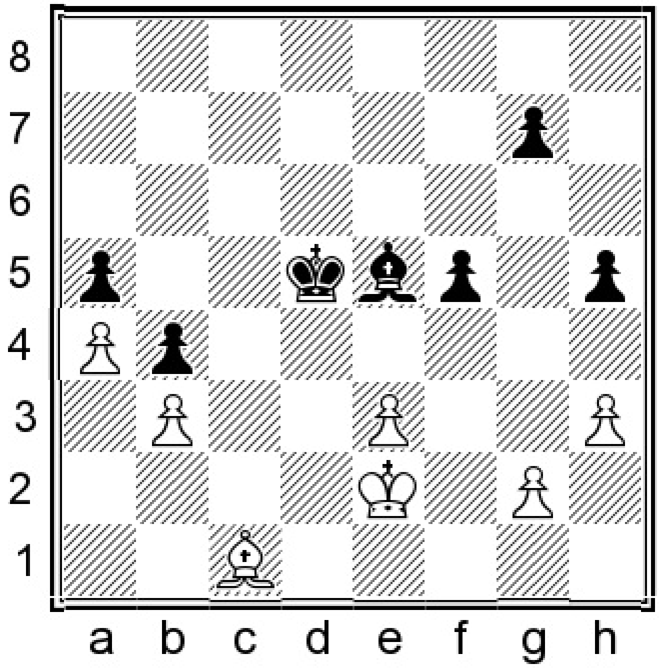
Show/Hide Solution

51
Shai Har-Zvi
Jesus de la Villa
Lugano 1988 (1)

Of course the white position hangs by a thread, and the thread can break:

54...♗e1 55.♔e2! Not 55.♗e3? a3!–+. **55...a3 56.bxa3 ♗xc3 57.♔e3 ♔e6 58.a4 ♗b4 59.♔e2 ♔d6 60.♔f3 ♔c6 61.f5 gxf5 62.♔f4 ♗c3 63.♗e3 ♗e1 64.♔xf5 c3 65.♗c1 ♗d2 0-1**

52



White to move

Can White save the game?

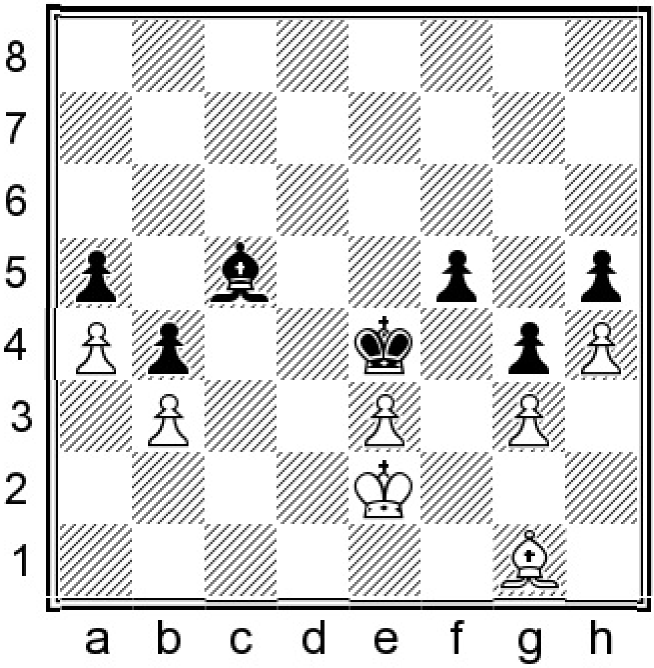
Show/Hide Solution

52
Igor Ivanov 2530
Larry Christiansen 2520
Pasadena 1983 (10)

Of course he can, but White needs to know the position with a central pawn down.

1.♗d2?? 1.♔d3! ♗c3 2.e4+!. This is the key move. After 2...fxe4+ 3.♔e2 the barrier is unbreakable; 1.♔f3, with the same idea but on the other side, also draws: 1...♗c3 2.e4+! fxe4+ 3.♔e2=.

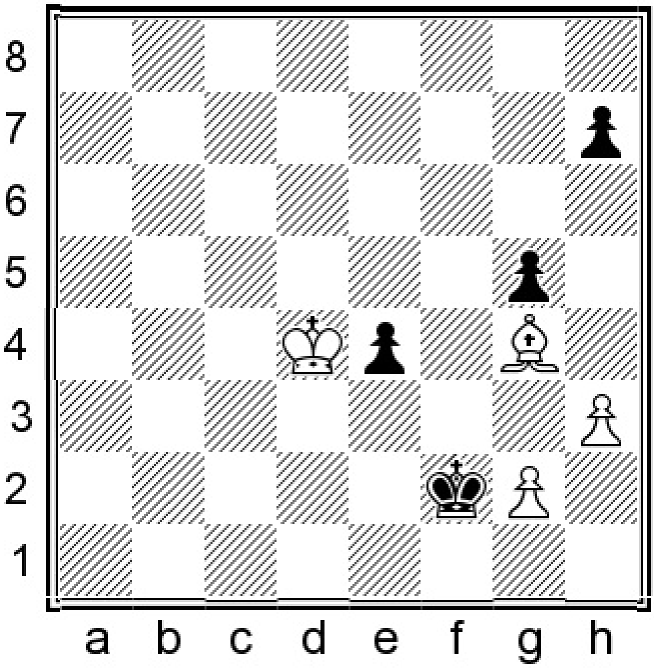
1.♗d2?? ♔e4 Once the black king seizes this square, the position becomes untenable. **2.♗e1 g5 3.h4 g4 4.g3** Or 4.♗f2 g3 5.♗e1 ♗d6! 6.♔d2 ♗c7! 7.♔e2 and the h4-pawn falls after 7...♗e5!, e.g. 8.♗d2 ♗f6 9.♗e1 ♗xh4 10.♔d2 f4–+. **4...♗d6 5.♗f2 ♗c5 6.♗g1**



8
7
6
5
4
3
2
1
a b c d e f g h

6...f4! 7.gxf4 g3 8.f5 ♗e7 9.♔f1 ♔f3! 10.e4 g2+ 11.♔e1 ♗xh4+ 12.♔d2 ♔xe4 13.♔e2 ♗f6 0-1

53



8
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a b c d e f g h

Black to move

51...e3 or 51...♔xg2 ?

Show/Hide Solution

53

Irina Dobrzhanskaia

J Stezhka

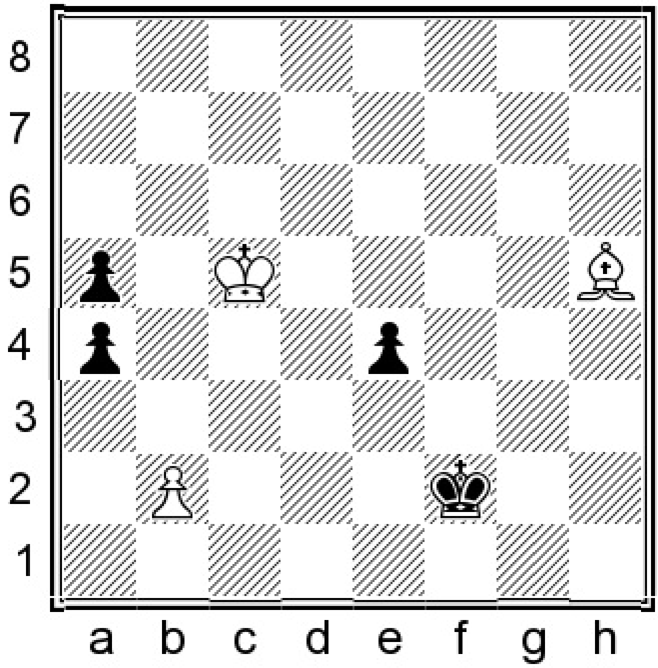
Alushta 1999

51...♔xg2?? Black leaves White with the wrong rook's pawn, but overlooks the trick with the sacrifice of the bishop.

51...e3! was the correct move, e.g. 52.♔d3 ♔xg2 53.♔xe3 ♔g3 54.♔e4 h5!= and the white king has not arrived in time, because if he now plays 55.♔f5?? then after 55...hxg4 56.hxg4 ♔h4–+ the zugzwang favours Black.

51...♔xg2?? 52.♔xe4 ♔g3 52...h5 is the normal move but perhaps Black now saw the move 53.♔f5!+– and thought that, with the king better placed, it would not work. **53.♔f5! ♔h4 54.♔f6** The quickest. **54...h6** 54...h5 55.♔f5. **55.♔g6 h5 56.♔f5!** and finally the key move, with a position of reciprocal zugzwang. **1-0**

54



Black to move

Can Black save the game?

Show/Hide Solution

54

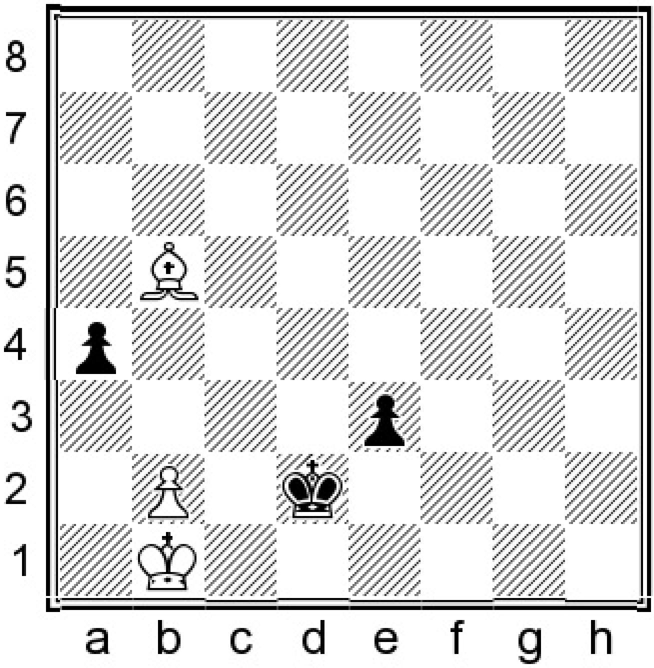
Hrvoje Stevic 2607

Veselin Topalov 2803

Khanty-Mansiysk 2010 (2)

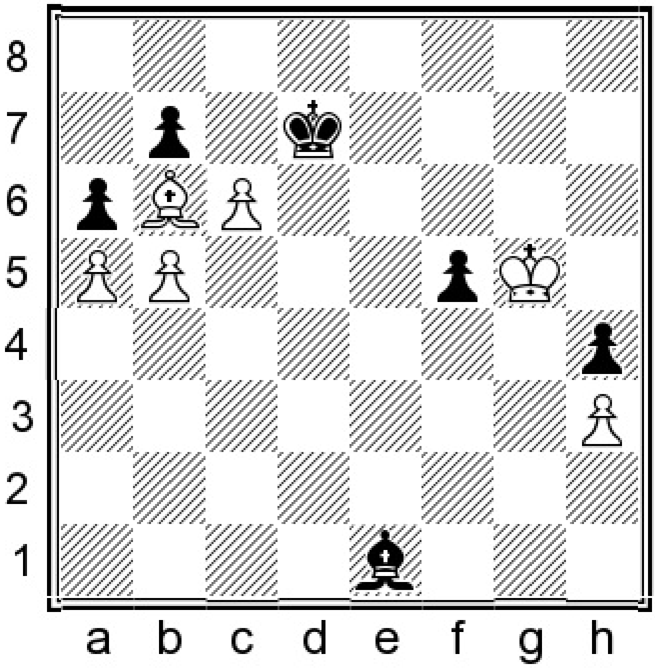
Black can save the game by keeping all the white pieces occupied: **49...♔e1** 49...e3? is premature: 50.♔b5 e2 51.♗xe2 ♔xe2 52.♔xa4 ♔d3 53.♔xa5+– and White has captured the two pawns in time.

49...♔e1 50.♔b5 ♔d2 51.♔xa4 ♔c2 52.♔a3 This is already a sign; the white king retreats to defend his last pawn and there is no zugzwang. **52...e3 53.♗e2 a4 54.♗a6 ♔c1 55.♔a2** If 55.♗b5 ♔b1!. **55...♔c2 56.♗c4 ♔c1 57.♗b5 ♔d2 58.♔b1**



58...e2! Forced, but this is possible now. **59.♗xe2 ♔xe2 60.♔c2 ♔e1! 61.♔c3 ♔d1 62.♔b4 ♔c2 63.♔xa4 ♔xb2 ½-½**

55



Black to move

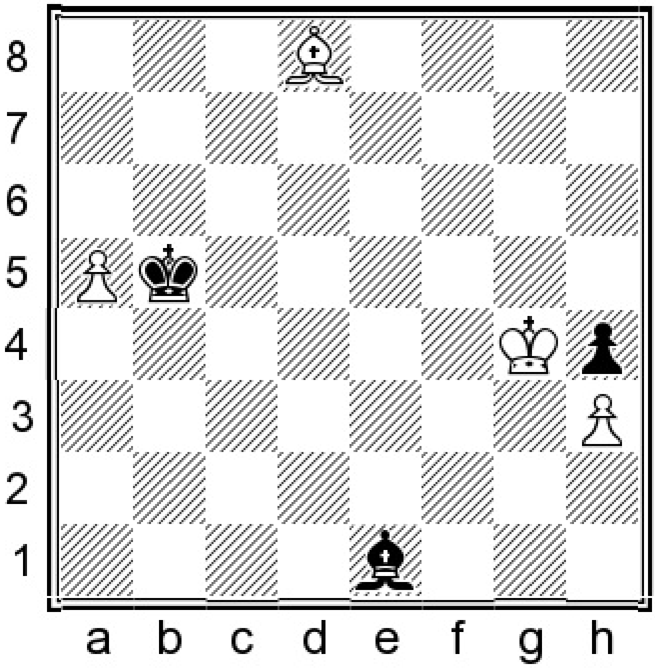
81...♔c8 or 81...bxc6 ?

Show/Hide Solution

55
Yu Yangyi 2677
Merijn van Delft 2430
Wijk aan Zee 2014 (9)

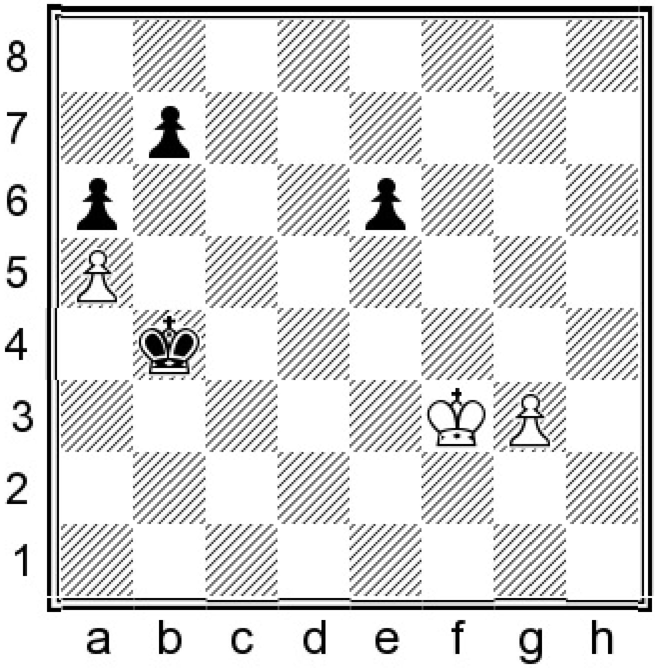
After going round and round in a drawn position, White managed to pull off the only trick in the position. **81...♔c8?** The decisive mistake. 81...bxc6! 82.bxa6 ♔c8 83.a7 ♔b7 84.a6+ ♔a8, with an obvious fortress.

81...♔c8? 82.cxb7+! ♔xb7 83.bxa6+ ♔xa6 84.♔xf5 ♔b5 84...♗b4 85.♔g4 ♗e7 86.♗f2 ♔xa5 87.♗xh4+–. **85.♔g5 ♗g3 86.♔g4 ♗e1 87.♗d8!**



Black is in zugzwang and must now move his king one square further away, which is enough to prevent him from gaining a draw. **87...♔a6 88.♗xh4 ♗xa5 89.♗g3 ♔b5 90.h4 ♔c6 91.h5 ♔d7 92.h6 ♗c3 93.♔f5 ♔e7 94.♔g6 ♔f8 95.h7 ♗h8 96.♗h4 1-0**

56



White to move

White wins, but he must be careful.

Show/Hide Solution

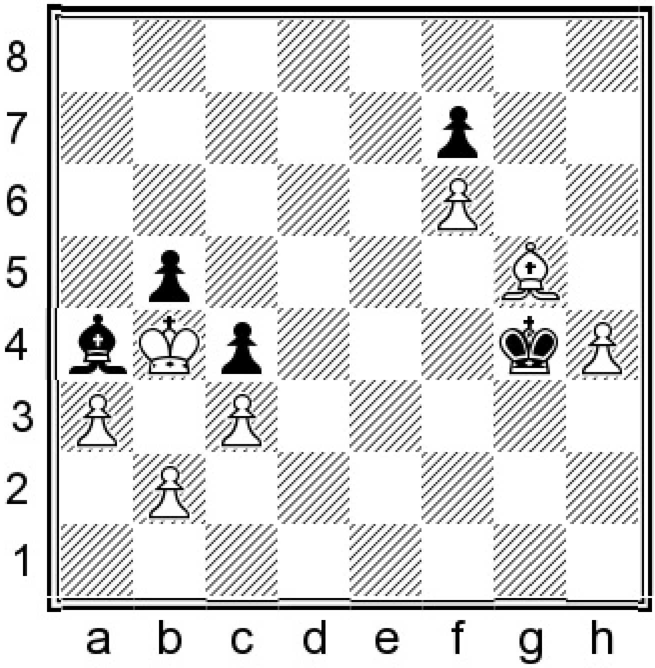
56

Vlastimil Jansa 2495
William Watson 2505
Oslo 1991 (2)

We have another case of a winning bodycheck being overlooked in the game. **60.♔e4!** 60.g4? ♔c5, with a draw, was the abrupt ending of the game. Certainly, the black king now enters the square of White's g-pawn and the advantage of the distant passed pawn is not enough to win, since White is left with just a rook's pawn: 61.g5 ♔d6 62.♔e4 ♔e7 63.♔e5 ♔f7 64.g6+ ♔xg6 65.♔xe6 ♔g5 66.♔d6 ♔f5 67.♔c7 ♔e6 68.♔xb7 ♔d7=.

60.♔e4! ♔c5 Trying to stop the white pawn. 60...♔xa5 (stepping out of the square) 61.g4 (now the black king cannot enter the square) 61...b5 62.g5 b4 63.g6 b3 64.♔d3+–. But in contrast the white king *can* catch the black pawn**: 61.♔e5!** The crucial bodycheck, which delays the black king and allows White to win, although it requires precise calculation. **61...b5** 61...♔c6 62.g4 (62.♔xe6 b5 63.axb6 a5!) 62...♔d7 63.g5 ♔e7 64.g6 zugzwang. **62.axb6 ♔xb6 63.g4 ♔c6** 63...a5 64.g5 a4 65.♔d4 e5+ 66.♔c3!+–. **64.g5 ♔d7 65.♔f6!** A new bodycheck. **65...♔e8 66.♔g7!** The final bodycheck of this game. **66...e5 67.g6 e4 68.♔h7 e3 69.g7 e2 70.g8=♕++–**

57



White to move

Can White win?

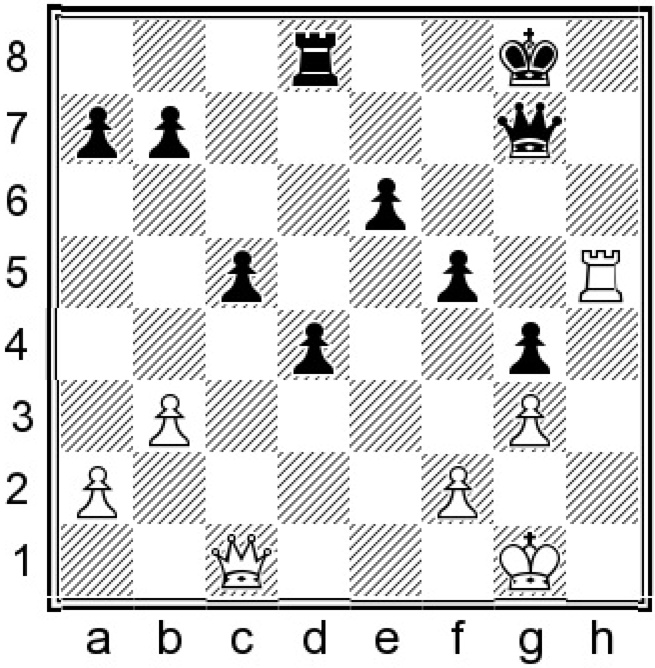
Show/Hide Solution

57
Erich Steflitsch 2371
Martin Neubauer 2428
Austria Bundesliga 2001/02

White can win, but must strike the decisive blow now, rather than prepare it with his bishop. **42.♗c1?** 42.b3! cxb3 (42...♗xb3 43.♔xb5+–) 43.♗c1 ♔xh4 44.♗b2+–, followed by c3-c4.

42.♗c1? ♔xh4 43.b3 Now it is too late, because White no longer has a passed h-pawn. **43...cxb3?** 43...♗xb3! and, as incredible as it might seem, the black king is able to set up the *zonal defence:* 44.♔xb5 ♔g4 45.a4 ♔f5 46.a5 ♔xf6 47.a6 ♗d1 48.a7 ♗f3 49.♔xc4 ♔e6 50.♔c5 ♔d7 – *zonal defence.* **44.♗b2 ♔g5 45.c4 bxc4 1-0**

58



Black to move

Black played 46...d3. Was it a mistake?

Show/Hide Solution

58

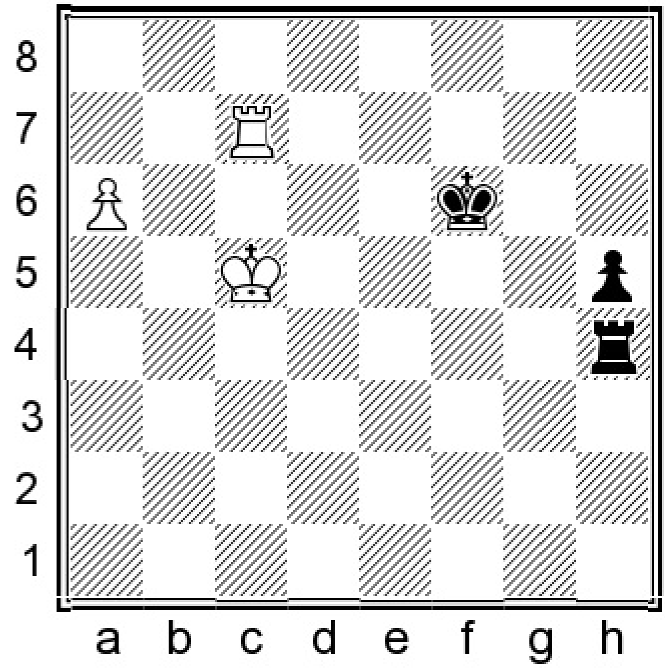
Klaus Herzog

Franz Künzner

Tirschenreuth 1982 (2)

No, 46...d3 was a well calculated move: **46...d3 47.♖g5 d2 48.♖xg7+ ♔xg7 49.♕d1 b5 50.♔f1 c4 51.bxc4 bxc4 52.♔e2 c3 53.a4 ♔f6 54.a5 c2 0-1**

59



Black to move

48...♖a4 or 48...♖h1 ?

Show/Hide Solution

59

Radoslaw Sliwerski 2139

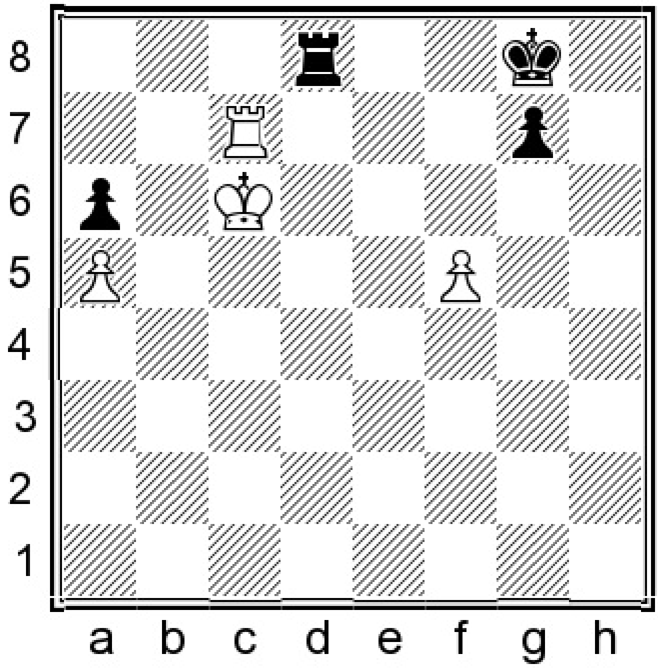
Mateusz Staroszczyk 2050

Grodzisk Mazowiecki 2007 (6)

It seems hard to believe, but it is not necessary to deploy behind the a-pawn yet, because White would then build a bridge: **48...♖a4?** 48...♖h1 49.a7 ♖a1 50.♔b6 ♖b1+ 51.♔c6 ♖a1 52.♔b7 ♔g5! and the h-pawn guarantees that Black will regain the rook he will very soon lose.

48...♖a4? 49.♔b5! ♖a1 50.a7? 50.♖c5! wins by cutting off the king and threatening to build a bridge: 50...♔g6 51.♔b6 h4 52.a7 ♖xa7 (52...h3 53.♖a5) 53.♔xa7+–. **50...♖b1+ 51.♔c6 ♖a1 52.♔b7 ♖xa7+ 53.♔xa7 h4?** Allowing his king to be cut off horizontally. Instead, 53...♔f5! would have drawn. **54.♖c5 ♔g6 55.♔b6 h3 56.♖c3 1-0**

60



Black to move

Can Black save the game?

Show/Hide Solution

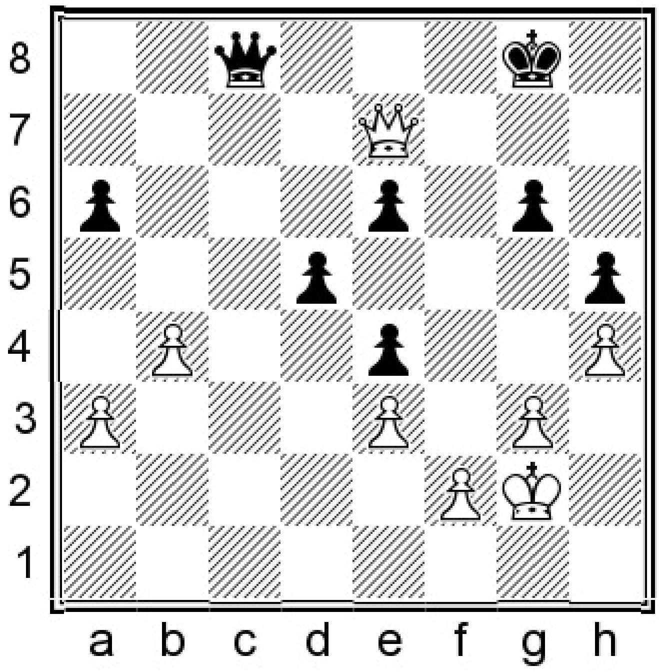
60
Yuri Shabanov 2425
Mihail Rodin 2360
Moscow 1991

Black can still save the game, but an important finesse is required: **73...♖f8?** 73...♖b8! 74.♖b7 ♖f8 75.♔b6 ♖xf5 76.♔xa6 g5 and now White's king and rook are getting in each other's way, which obliges White to liberate the black king with 77.♖b5 (77.♔b6 ♖f6+ 78.♔a7 g4) 77...♖f6+ 78.♔b7 ♖f7+=.

73...♖f8? 74.♔b7! ♖xf5 75.♔xa6 ♔h7 75...g5 moves the pawn too far away from the king, which will be unable to leave the back rank: 76.♔b6 ♖f6+ 77.♔b7 g4 78.a6 g3 79.a7+–. **76.♔b6 ♔h6 77.a6 ♖f1 78.a7 ♖b1+** 78...♖a1 79.♖c6+ (79.♔b7 transposes to the game: 79...♖b1+ 80.♔c8 ♖a1 81.♔b8 ♖b1+ 82.♖b7) 79...g6 80.♖c5. **79.♔c6 ♖a1 80.♔b7 ♖b1+ 81.♔c8 ♖a1 82.♔b7 ♖b1+ 83.♔c8 ♖a1 84.♖c6+ ♔g5 85.♔b7** Threatening to build the bridge. **85...♖xa7+ 86.♔xa7 ♔f5 87.♔b6 g5 88.♔c5**, and the white king arrives in time. **1-0**

Show in Text Mode

61



White to move

Is 38.a4 the best move for White?

Show/Hide Solution

61

Andrei Kharitonov 2550

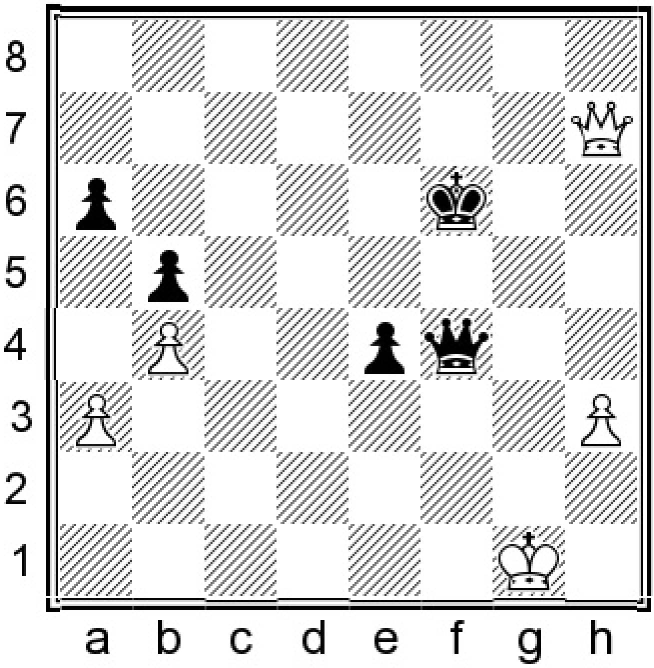
Vasily Ivanchuk 2625

Frunze 1988

No, **38.a4?** allows hidden counterplay. 38.♕d6! further increases the white queen’s domination and prepares the advance of his central majority without allowing any counterplay, e.g. 38...♔h7 39.a4+–.

38.a4? d4! But Black played 38...♕c6?, allowing 39.♕f6!, increasing the domination, and had to resign. **39.exd4 e3 40.fxe3?** 40.♔f3! maintains a big advantage, e.g. 40...exf2 41.♔xf2 ♕c2+ (41...♕c4!?) 42.♔f3 ♕d3+ 43.♔f4 ♕f5+ 44.♔e3 and the checks end. **40...♕c2+=**

62



Black to move

48...♕c1+ or 48...♕g3+ ?

Show/Hide Solution

62

Eduard Prandstetter

Florin Gheorghiu

Warsaw zt 1979 (5)

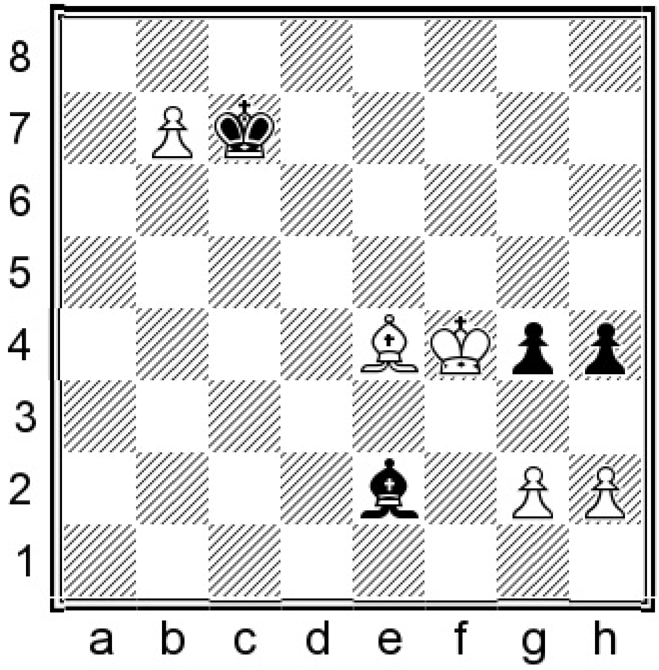
Black is much better, but he needs to reposition his queen and slip in with the king:

48...♕g3+? This move is unsuccessful. 48...♕c1+! 49.♔f2 ♕d2+ 50.♔f1 (50.♔g3 ♕e3+ 51.♔g2 ♕e2+ 52.♔h1 ♕f1+ 53.♔h2 ♕f2+ 54.♔h1 e3–+) 50...e3 51.♕h4+ ♔e5 52.♕g5+ ♔d4 53.♕f6+ ♔d3 54.♕f5+ ♔c3 55.♕e5+ ♔c2 56.♕e4+ ♔c1 57.♕c6+ ♔d1–+.

48...♕g3+? 49.♔f1 ♕f3+ 50.♔e1 With the king in front of the passed e-pawn, White has no problems. **50...♔e5 51.♕c7+ ♔d4??** This allows White to force the exchange of queens and win the game.

52.♕c5+ ♔d3 53.♕d5+ ♔c3 54.♕d2+ ♔b3 55.♕d1+ ♔xa3 56.♕xf3+ exf3 57.h4 1-0

63



White to move

Does 56.h3 win?

Show/Hide Solution

63

Alik Gershon

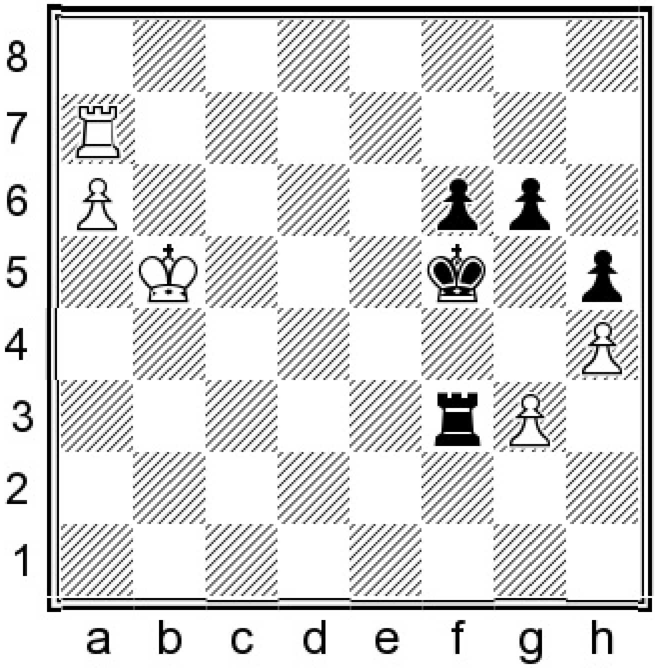
Trostur Thorhalsson

Mermaid Beach Club 1999

No, it does not win. White miscalculates, through being too materialistic, as we shall see now: **56.h3??** 56.♔g5 wins, as do several other moves: 56...h3 57.g3+–.

56.h3?? gxh3 57.gxh3 ♗a6 58.♔g5 ♗xb7 59.♗xb7 ♔d7! Obviously White was expecting Black to capture the bishop. Why, though, if the bishop is useless? **60.♔xh4 ♔e7** and the king reaches the corner: **½-½**

64



White to move

Where should White move his rook to?

Show/Hide Solution

64

Konstantin Lerner

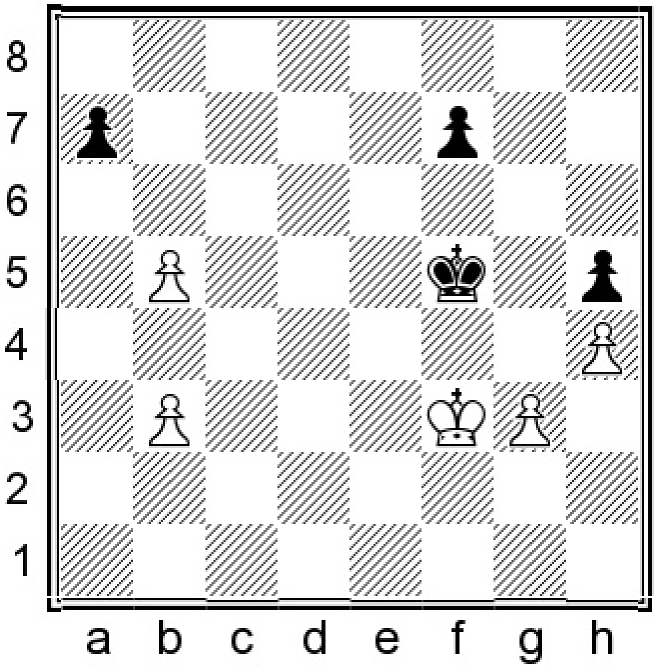
Josif Dorfman

Tashkent ch-URS 1980 (analysis)

Only one move is a clear win: **64.♖c7!** Instead, 64.♖d7?! ♖xg3! 65.♖d5+ (65.a7 ♖a3 66.♖c7 threatens to build a bridge and forces the immediate sacrifice of the rook: 66...♖xa7 67.♖xa7 ♔g4 68.♖f7 ♔xh4 69.♖xf6 g5 70.♔c4 g4 71.♔d3 ♔g3 72.♔e2+–) 65...♔e4 is not so clear.

64.♖c7! ♖xg3? 64...♖a3 65.♖c4+–, threatening the bridge and restricting the white king. **65.a7 ♖a3 66.♖c5+** and Black is unable to prevent White from building a bridge on either the fourth or the sixth rank.

65



White to move

Can White win?

Show/Hide Solution

65

Jouni Yrjola 2495

Markku Kosonen

Tromsø 1990 (5)

Of course White can win, as long as he plays all his trumps well:

a) the reserve tempo (which he must use right now);

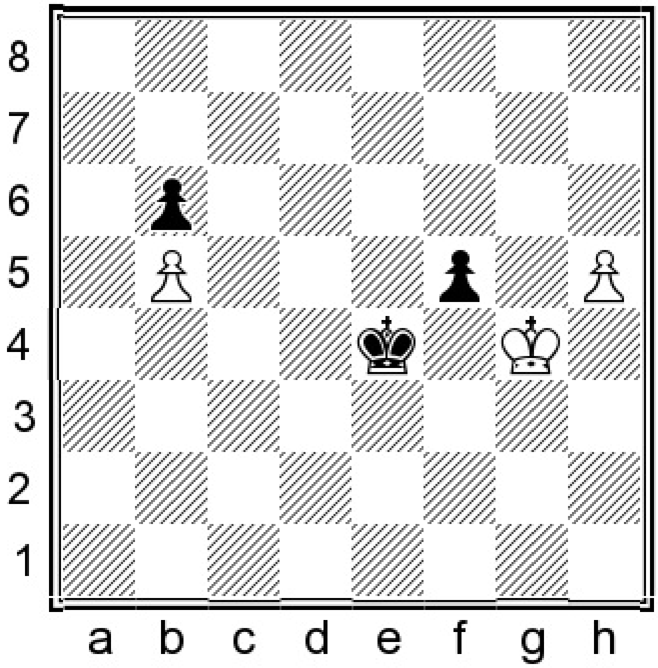
b) the creation of a new reserve tempo by sacrificing the doubled pawn;

c) the creation of a distant passed pawn;

d) the correct king retreat, dodging a check.

58.b4! 58.g4+ hxg4+ 59.♔g3 f6 60.b4 is not the same, since Black can play 60...♔e4= 61.♔xg4 f5+ 62.♔h3 ♔e3!.

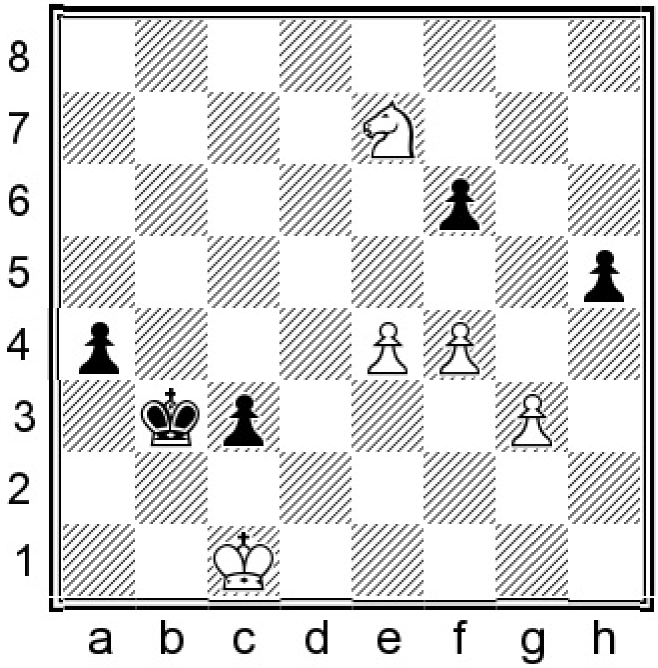
58.b4! f6 ‘I also have a reserve tempo!’ **59.b6!** ‘But I have another one!’ **59...axb6 60.b5 ♔e5 61.g4 hxg4+ 62.♔xg4 ♔e4 63.h5 f5+**



64.♔h3! The final finesse. **1-0**

Calculating an ending like this is a great pleasure, because often things do not work in such a precise manner.

66



White to move

Can White win?

Show/Hide Solution

66

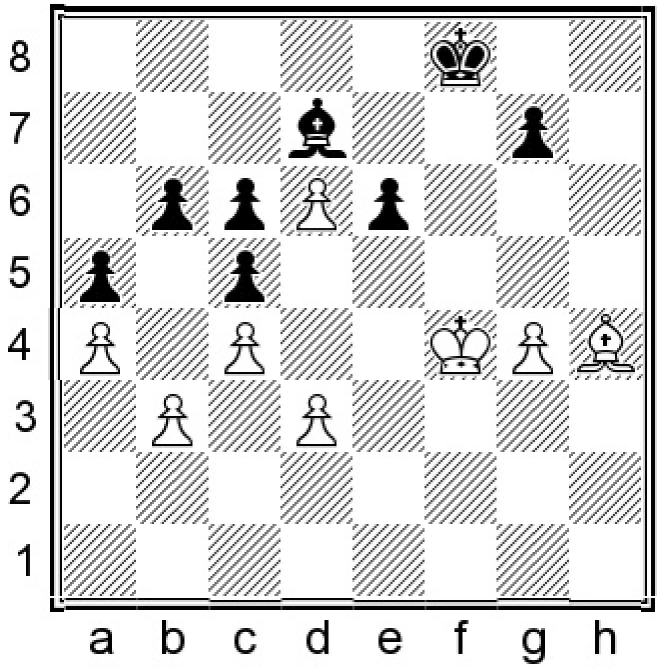
Shakhriyar Mamedyarov 2719

Wang Hao 2708

Khanty-Mansiysk 2009

It might seem strange, but the knight arrives in time to stop both black pawns and win the game: **46.♘d5! a3 47.♘e3 a2 48.♘c2 ♔c4 49.♔d1 a1=♕+ 50.♘xa1 ♔d4 51.e5! fxe5 52.f5! 1-0**

67



Black to move

Does Black have a defence?

Show/Hide Solution

67

Jan Ambroz 2485

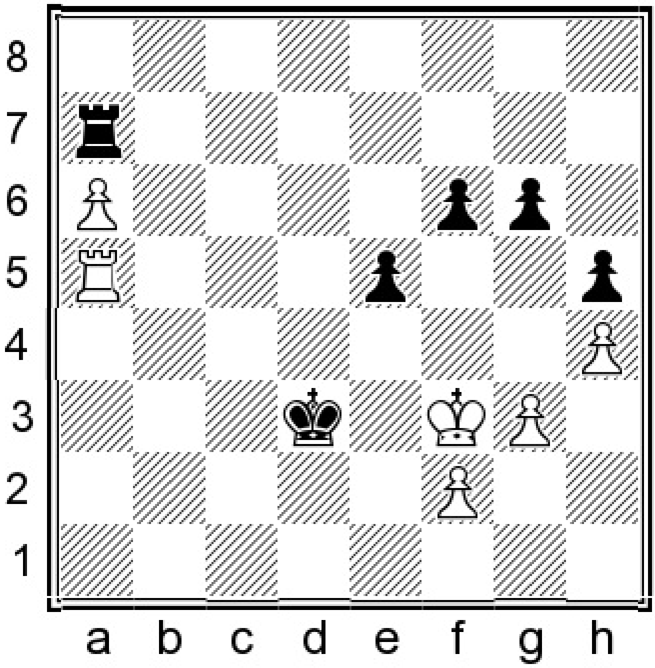
Josef Pribyl 2440
Hradec Kralove 1981 (9)

White has a very dominant position, but Black can coordinate his pieces well, with his king preventing penetration by the white bishop, his bishop threatening an attack on the white pawn chain and his useless e-pawn leaving the board:

34...e5+!! 34...♔e8? 35.♔e5 ♗c8 36.♗e7 ♗d7 37.g5 ♗c8 38.g6 ♗d7 39.♗f6!+–.

34...e5+!! 35.♔xe5 ♔e8! First Black needs to defend. 35...♗xg4? would be premature: 36.♗d8 b5 37.♗xa5 bxa4 38.bxa4+–. **36.♔f4 ♗e6! 37.♔g5 ♔d7 38.♗g3 ♗f7!** 38...♗g8? 39.♔g6. **39.♗e5 g6 40.♗f6** 40.♔f6 ♗e6 41.g5? ♗f5–+. **40...♗e6 41.♔f4 ♗g8 42.♔e5 ♗e6 43.♔f4 ½-½**

68



White to move

Can White make progress?

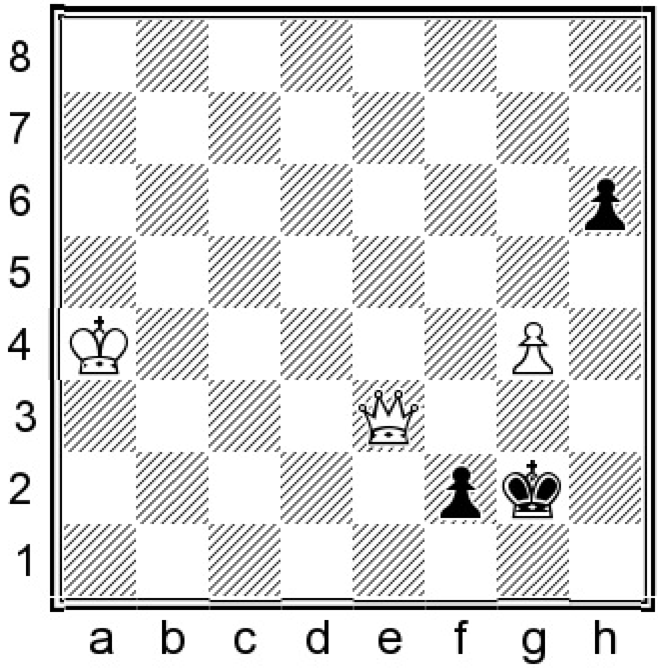
Show/Hide Solution

68
David Anton Guijarro
David Pardo

Salobreña 2013 (8)

White can make progress (and win) by transferring his rook to the sixth rank: **44.♖d5+! ♔c4 45.♖d6+– ♖f7 46.♔e4 ♔c5 47.♖e6 ♔b5 48.a7 ♖xa7 49.♖xf6 ♖a2 50.♔xe5 ♖e2+ 51.♔d5 1-0**

69



White to move

Find a manoeuvre to win.

Show/Hide Solution

69

Jeroen Bosch 2443

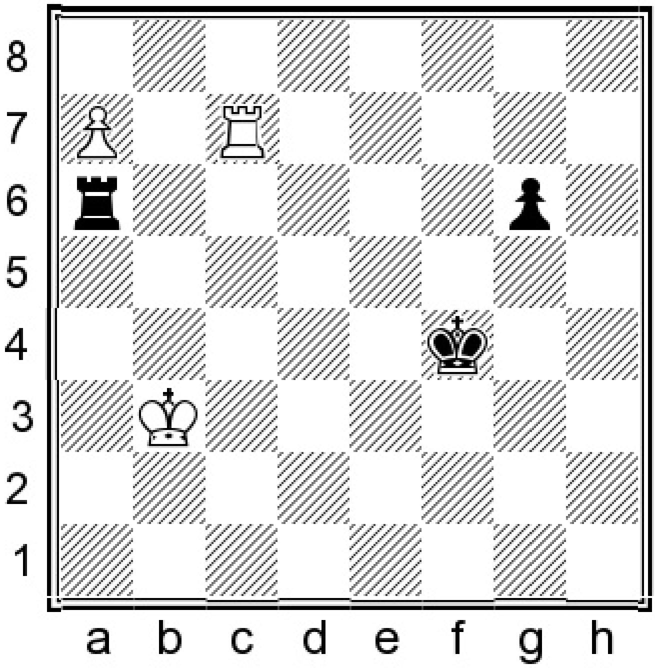
Paul van der Sterren 2576

Breda 2001 (1)

White could see no way to make progress and eventually settled for a draw: **72.♕e4+** 72.♕e2! ♔g1 73.g5! (this move is the key) 73...hxg5 74.♕g4+ ♔f1 (the king cannot go to the corner because there is no stalemate trick) 75.♕h3+ ♔e2 76.♕g2 ♔e1 77.♕e4+ ♔f1 78.♔b3 ♔g1 79.♕g4+ ♔h2 80.♕f3 ♔g1 81.♕g3+ ♔f1 82.♔c2+– ♔e1 83.♔d3 g4 84.♔c2 ♔e2 85.♕d3+ ♔e1 86.♕d1#.

72.♕e4+ ♔g1 73.g5?! Here this is not as effective. **73...f1=♕ 74.♕g4+?** Nevertheless, 74.g6! was still winning. **74...♔h2 75.g6 ♕a6+ 76.♔b4 ♕b6+ 77.♔c4 ♕c6+ 78.♔d3 ♕d5+ 79.♔e3 ♕b3+ 80.♔f2 ♕c2+ 81.♔e1 ♕c3+ 82.♔f2 ♕c2+ 83.♔e3 ♕c3+ 84.♔e2 ♕c2+ 85.♔e1 ♕c3+ 86.♔f2 ½-½**

70



Black to move

What is the correct plan for Black?

Show/Hide Solution

70

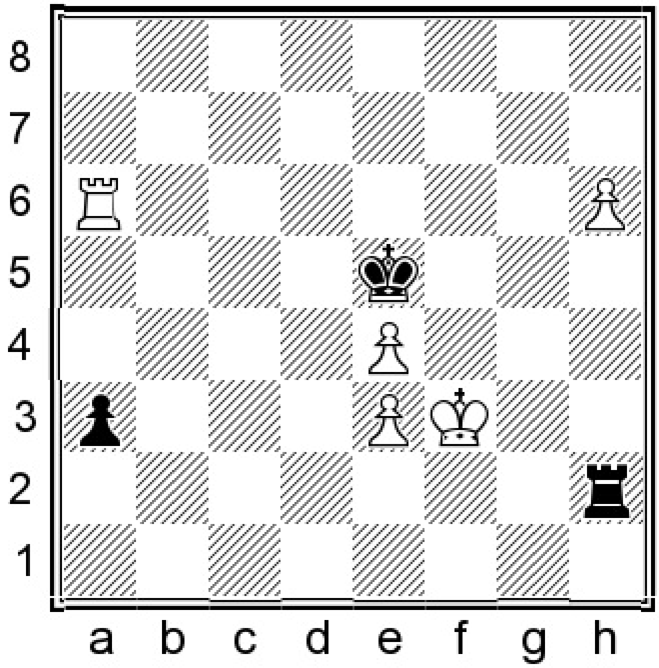
Eckhard Schmittdiel 2435
Stephan Becking
St Ingbert 1995 (2)

53...g5? Supporting the pawn does not work, because White wins the rook very quickly. The correct plan for Black is to transfer the king to the queenside, either to get to the pawn or else (the most normal outcome) to drive the white king to the edge of the board: 53...♔e5! 54.♔b4 ♖a1! 55.♖c5+ ♔d4 56.♖a5 ♖b1+ 57.♔a3 (57.♔a4?? even loses after 57...♔c4–+) 57...♖a1+, with perpetual check.

53...g5? 54.♖c4+! ♔f3 55.♖a4 ♖xa7 56.♖xa7 g4 57.♖f7+ ♔g3 58.♖g7 ♔f3 59.♔c2 g3 60.♔d2 ♔f2

61.♖f7+ ♔g1 62.♔e2 ♔h2 63.♖g7 1-0

71



White to move

How does White win?

Show/Hide Solution

71

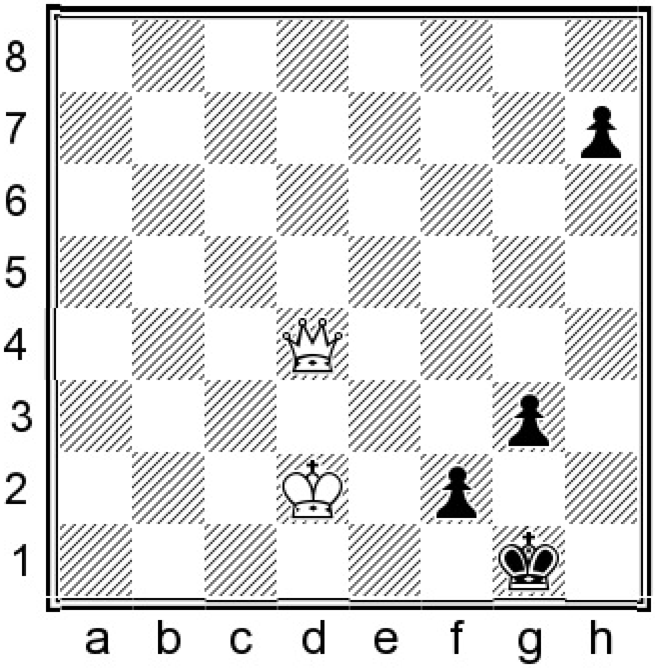
Zbigniew Jasnikowski 2430
Thezlo Hazai 2460
Espoo 1989 (8)

White is able to keep his two extra pawns with a display of tactical resources:

37.♔g3! The game continued 37.♖a5+ ♔f6 38.♖xa3 (38.e5+!? ♔g6 39.♖xa3 ♔xh6 is a draw) and White fell for a thematic trick after 38...♖xh6! 39.♖a6+ ♔e5! 40.♖xh6 stalemate.

37.♔g3! ♖h1 38.♔g2 ♖h4 The rook cannot go to any other square. **39.♖a5+!** Now the king cannot capture the pawn. **39...♔f6 40.♖xa3** and now the rook is unable to capture on h6: **40...♖xe4 41.♔f3 ♖h4 42.♖a7** and once again White remains two pawns up.

72



Black to move

What is the correct result?

Show/Hide Solution

72

José Ortega Gonzalez 1905
José Luis Garcia Roman 2003
Malaga 2010 (7)

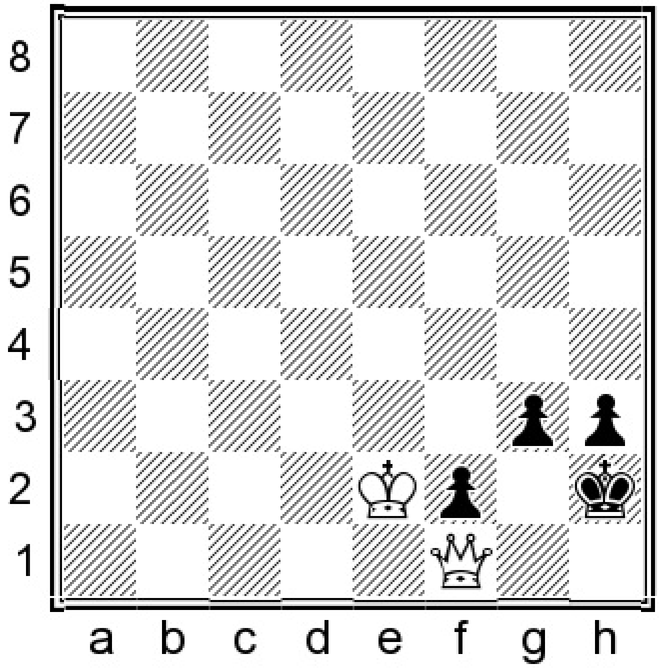
Black can draw, but not by advancing the pawns:

69...h5?

69...♔g2!, threatening to queen the pawn: 70.♕e4+ ♔g1 71.♕e3 ♔g2 and White has to repeat moves, because the pawn on g3 prevents the checks that would allow progress to be made;

69...g2? 70.♔e2–+.

69...h5? 70.♔e2 h4 71.♕a1+ 71.♔f3! wins very quickly, e.g. 71...h3 72.♔xg3, with mate in two. **71...♔h2 72.♕f1 h3**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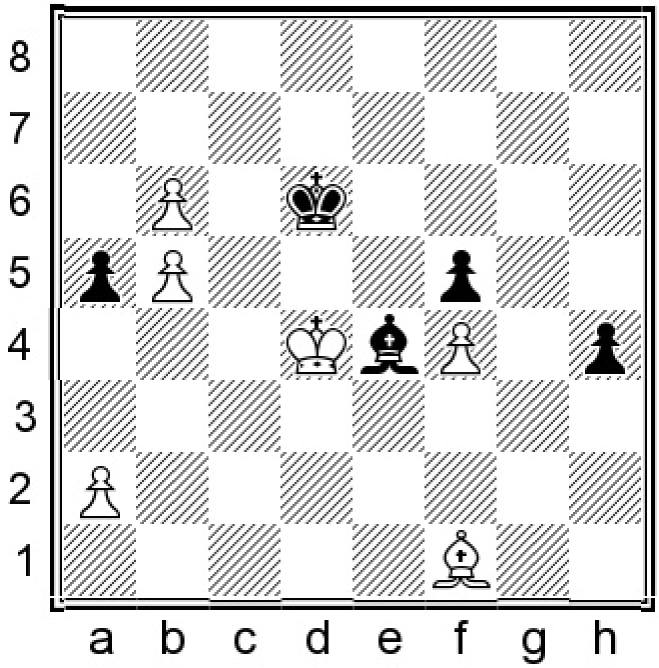
73.♔e3 g2 74.♕xf2 ♔h1 75.♕f3 h2 76.♕d5 ♔g1 77.♕d1#

73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White to move

Can White win?

Show/Hide Solution

73

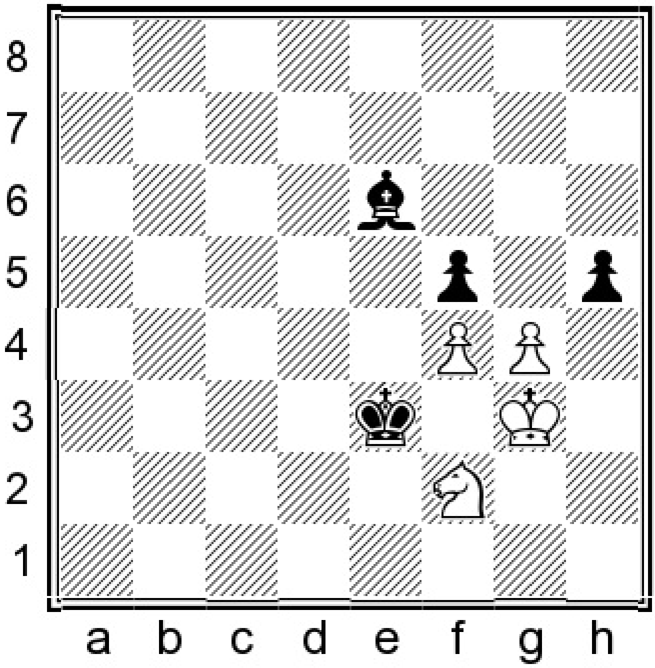
Pablo Almagro Llanas 2479
Mikel Huerga Leache 2451
Villava 2009

A very complex ending, which ended in a victory for Black:

36.a3!! puts Black in zugzwang. Instead, the game continued 36.♗h3? ♗b1 37.a3 ♗e4 38.♗f1 ♗b7 39.♗h3 ♗e4 40.♔e3 ♔d7 41.♔f2 ♔c8 42.♔g1 ♔b7 43.♔h2?! ♗d3 44.a4?? ♔xb6 45.♔g2? ♗c2–+ 46.♔f2 ♗xa4 47.♗xf5 ♗xb5 48.♗e6 ♔c5 49.f5 ♔d6 50.♔g2 ♗d7 0-1.

36.a3!! ♗f3 36...♔d7 allows 37.♔e5 ♔c8 38.♔f6 ♔b7 39.♔g5 ♔xb6 40.♔xh4 ♗c2 41.♔g5+–, followed by the capture of the f5-pawn and the advance of White's f-pawn. **37.♗h3 ♗e4 38.♔c3!** Heading for a4. **38...♔c5 39.♗xf5! ♗g2 40.♗h3! ♗e4 41.f5** White wins, as he has too many passed pawns and even if Black were able to capture both b-pawns with the king and sacrifice the bishop for the f-pawn, White would still be left with the 'right' rook's pawn (i.e. the white bishop is the right colour for controlling the queening square a8).

74



Black to move

Which is the correct recapture?

Show/Hide Solution

74

Krzysztof Jakubowski 2458
John Shaw 2506
Cappelle-la-Grande 2002 (4)

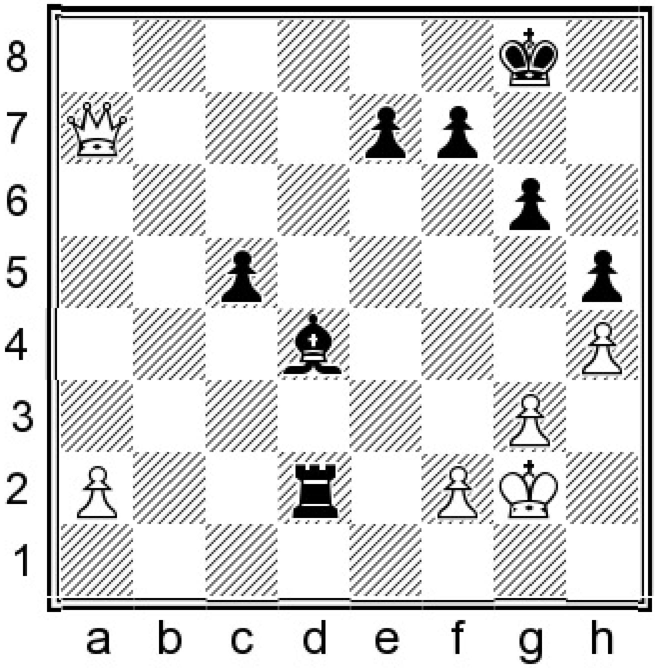
In my opinion, the solution here is very surprising, specifically that White is able to set up a blockade against two passed pawns, but not against one.

48...fxg4? The blockade fails once again due to zugzwang, combined with the domination of the knight.

48...hxg4! was correct. Although the white majority appears to be blockaded, the shortage of squares for the knight leads to a loss, for example: 49.♘d1+ (not 49.♘h1 ♗d5 50.♘f2 ♗f3 with domination) 49...♔d2 50.♘f2 (50.♘b2 ♗b3, domination again) 50...♔e2 51.♘h1 ♗d5 52.♘f2 ♗f3–+.

48...fxg4? 49.♘d1+ ♔d2 50.♘f2 ♗f5 50...♔e2 51.♘e4!=. This square makes all the difference. **51.♔h4** Sacrificing the pawn in order to be able to place the pieces on their ideal blockading squares. **51...♔e3 52.♘h1! ♔xf4 53.♘g3 ♗g6 54.♘f1 ♗e8** with an unbreakable blockade. **½-½**

75



White to move

What is White aiming for?

Show/Hide Solution

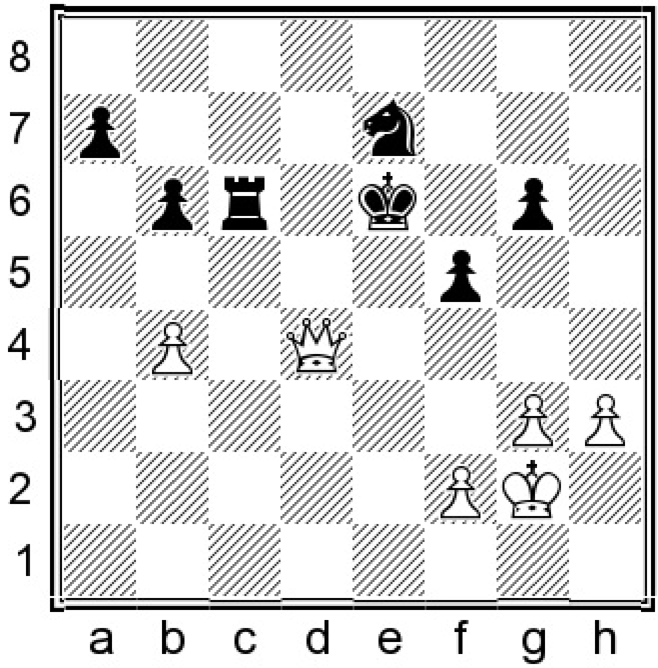
75
Andrei Kharlov 2555
Ulf Andersson 2605
Haninge 1992 (8)

Despite having a queen and a passed a-pawn, a draw is the most that White can hope for, and he needs to be seeking the queen’s usual resources, i.e. he should be trying to open up the enemy king in search of perpetual check.

32.a4?, attempting to advance the pawn, is too slow and leads to a quick defeat. 32.g4! was best, to give the white king another square but above all to expose the black king and seek perpetual check: 32...c4 (32...♖xf2+ 33.♔g3 hxg4 34.♕xe7 ♖xa2 35.h5 gxh5 36.♕g5+=) 33.♕a8+ ♔g7 34.gxh5 gxh5 (34...c3 35.hxg6 c2 36.gxf7 ♖xf2+ 37.♔g3 ♔xf7 38.♕d5+ ♔f8 39.♕xd4 c1=♕=) 35.♕d5 c3 36.♕g5+ ♔f8 37.♕h6+ ♗g7 38.♕g5=.

32.a4? c4!–+ Perhaps White was not expecting the advance of the pawn that was supporting the bishop, but the fact is that it advances very quickly. **33.♕c7 c3 34.a5 ♖xf2+ 35.♔h3 e5 36.♕c4 c2 37.a6 ♗e3** and White resigned.

76



White to move

Which move initiates the correct plan, 47.h4 or 47.g4 ?

Show/Hide Solution

76

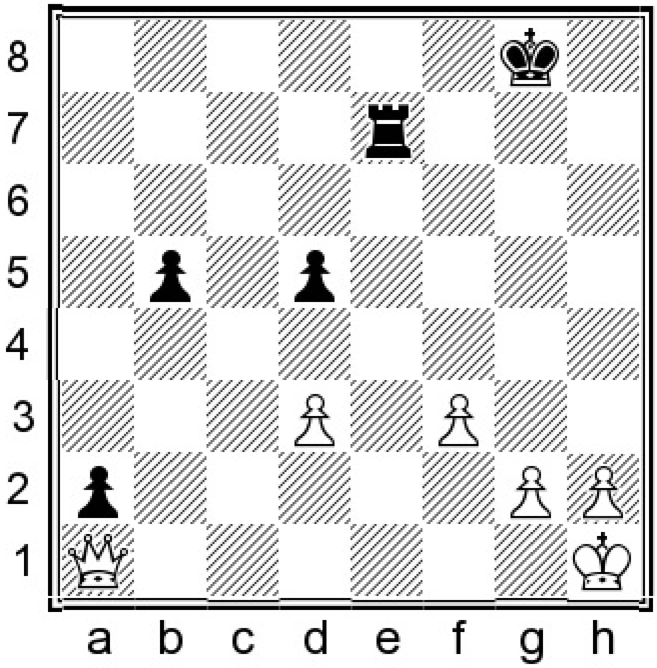
Eloi Relange 2455
Jesus de la Villa 2500
Chanac 1995

The correct plan for White is to create a passed h-pawn, because rook and knight have greater difficulty in coordinating to stop it:

47.g4? White is giving up on the idea of having a passed pawn on the h-file. 47.h4! (prepares f2-f3, g2-g4 and h4-h5) 47...a6 48.f3 b5 49.g4 fxg4 50.fxg4 ♔f7 51.♔g3 ♖f6 52.♕d7 ♖c6 53.♔f4 ♖f6+ 54.♔g5 ♖c6 55.h5 gxh5 56.gxh5 and the passed h-pawn must win.

47.g4? fxg4 48.hxg4 a6! Now the passed pawn will be an f- or g- pawn and in either case the rook and the knight can coordinate to stop it. **49.f4 b5 50.♔g3 ♖d6 51.♕e5+ ♔d7** Black has constructed a fortress. His queenside is impregnable and the rook and knight hold up the advance of the white passed pawn on the same square. **52.f5 gxf5 53.gxf5 ♘d5!= 54.♕g7+ ♔d8! 55.♔f3 ♘f6 56.♕b7 ♘d7 57.♕e4 ♖f6 58.♔f4 ♖b6 59.♕g2 ♖f6 60.♕g7 ♖b6 61.♔e4 ♖f6 62.♕g5 ♔c7 63.♕c1+ ♔d8 64.♕f4 ♖b6 65.♔d5 ♘f6+ ½-½**

77



White to move

What can White achieve?

Show/Hide Solution

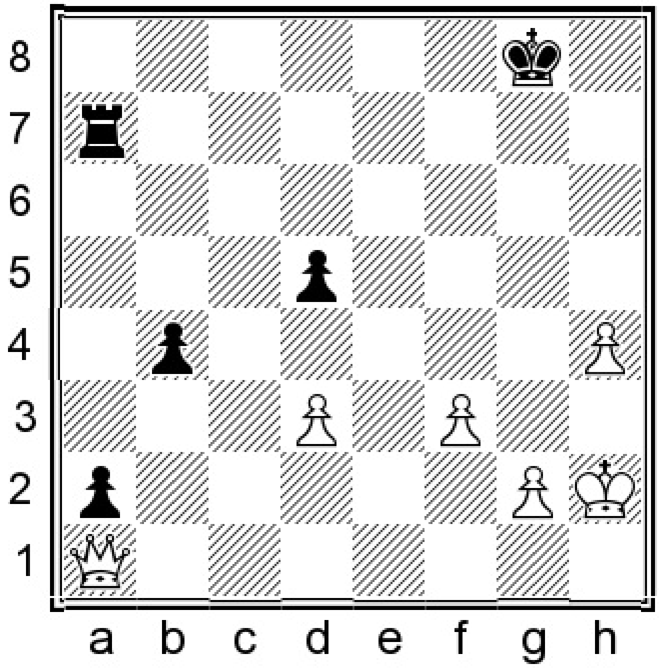
77

Emilio Pupo

Rene Alonso Garcia 2335

St Spiritus 1989 (2)

White has already got himself into a mess, but by seeking perpetual check he can still keep the draw in hand. **40.♕c1?** This is evidence of fright. White tries to give perpetual check but does so without paying due attention. He needs to do three things: get his king off the back rank, close the long diagonal with d3-d4 and finally remove the queen from the blockade square and threaten checks. 40.h4 ♖a7 41.♔h2 b4

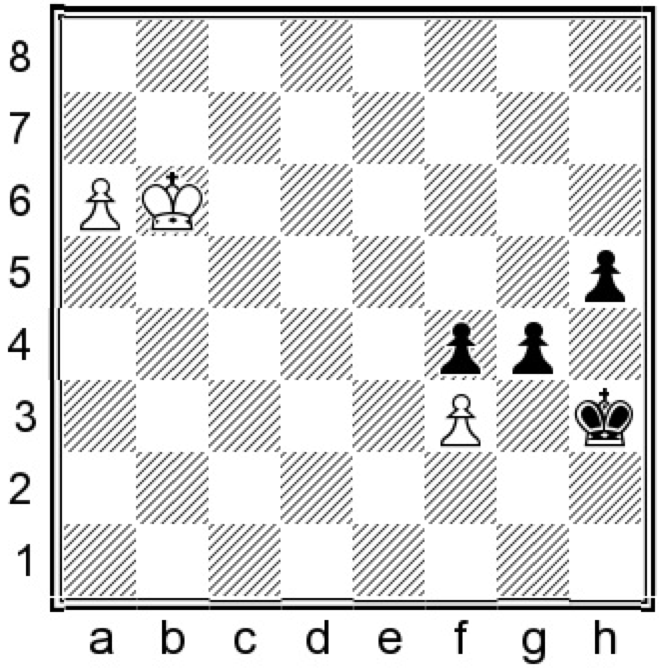


analysis diagram

leads to the typical position in which the queen usually loses against a rook and two passed pawns; the b-pawn advances to b2 and lifts the blockade by the queen. But here White still has time for perpetual check: 42.d4! (closing the long diagonal, so that Black's newly promoted queen will not be able to thwart White's perpetual check) 42...b3 43.♕c1! and a perpetual is guaranteed: 43...a1=♕ 44.♕g5+.

40.♕c1? ♔h7! 41.♕g1? Although White has wasted a tempo, there were still hopes with 41.g4, e.g. 41...♖a7 42.♕a1 b4 43.♔g2 b3 44.♕f6!. **41...b4 42.f4 b3 43.♕d1 ♖e2?!** Good enough to win the game, especially because White resigned here; 43...♔h6!–+. **44.♕c1 ♖e7 45.♕d1 ♔h6!–+**

78



White to move

Exchange, or advance at once?

Show/Hide Solution

78

Horst Bäcker

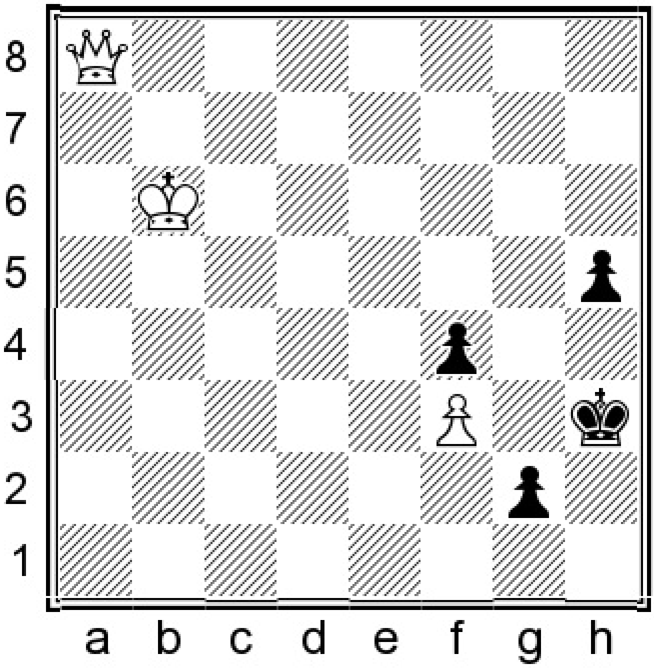
Thomas Lochte 2265

Bad Wildbad 1993 (6)

54.a7?? White decides to prevent the draw that he perceives behind the capture on g4, but his solution is worse.

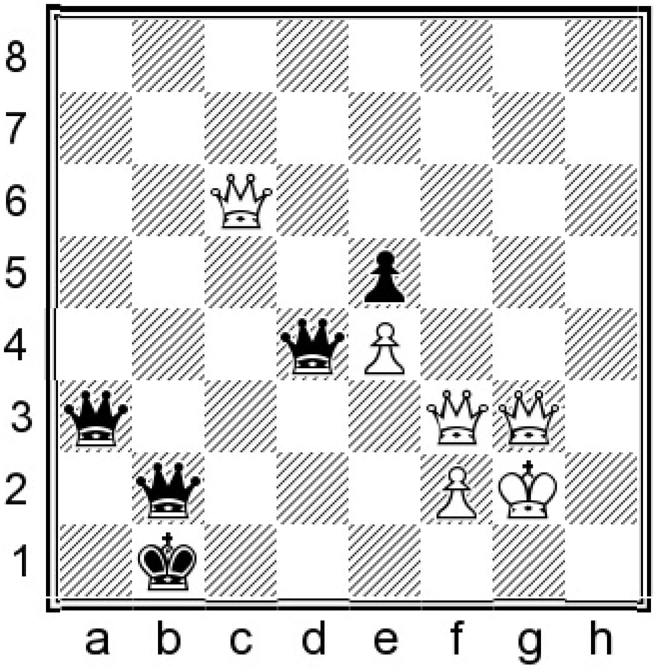
54.fxg4 f3! 55.a7 f2 56.a8=♕ f1=♕=.

54.a7?? g3 55.a8=♕ g2



It is hard to believe that the queen could lose against those awful pawns, but that is what happens; all the lines for the queen to give check are closed. **56.♕c8+ ♔h2 57.♕c2 ♔h1 58.♕e2 g1=♕+ 59.♔c6 ♕e3 60.♕f1+ ♔h2 61.♔d5 ♔g3 0-1**

79



Black to move

What can Black achieve?

Show/Hide Solution

79

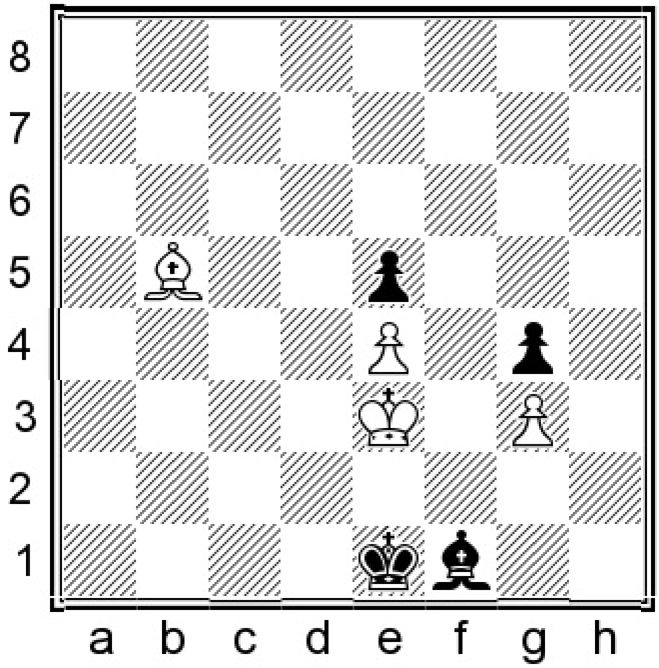
David Anton Guijarro 2469
Alejandro Franco Alonso 2454
Elgoibar 2011 (6)

It is a pity not to go down to posterity by finding the correct move in such a position. This is surely the record for the number of queens on the board in a single game played at a certain level. And it could also be the record for losing the greatest number of queens in the fewest moves. Black makes three moves and then has no queens left.

74...♕dxf2+!! Instead, Black erred with 74...♕xf3+. The exchange of one queen greatly facilitates White's task, as the endings with less material are winning. 75.♕xf3 ♕c2 76.♕b5+ ♕cb2 77.♕fd3+ ♕xd3 78.♕xd3+ is winning for White, as confirmed by the Lomonosov tablebases. The game continued 78...♔c1 79.♔f3 ♕d4 80.♕e2 ♕d6 81.♕c4+ and here 81...♔d2? 82.♕d5+ made the task even easier.

74...♕dxf2+!! 75.♕gxf2 Or 75.♕fxf2 ♕xg3+ 76.♔xg3 ♕c3+ 77.♕xc3 stalemate. **75...♕xf3+ 76.♔xf3 ♕c3+ 77.♕xc3** stalemate.

80



White to move

Black wants to play 71...♗g2 and then complete the outflanking manoeuvre with his king. Can White prevent this?

Show/Hide Solution

80
Karl Pedersen 2345
Erik Jelling 2200
Aarhus 1987 (3)

Of course White can. He can even prevent the black bishop from moving to e2, or at least from doing so with any hopes of winning the game. But it is all based on a single and perhaps unexpected idea: stalemating the white king on e3. **71.♗d7** 71.♗e2!= is the quickest way;

71.♗a6 is not bad either, leaving it to Black to choose which of the kings is stalemated.

71.♗d7 ♗e2 Now this is necessary. **72.♗e6?** 72.♗b5!=; there was no other defence now. **72...♔f1** followed by ♗f3, ♔g2 and ♔g3. **0-1**

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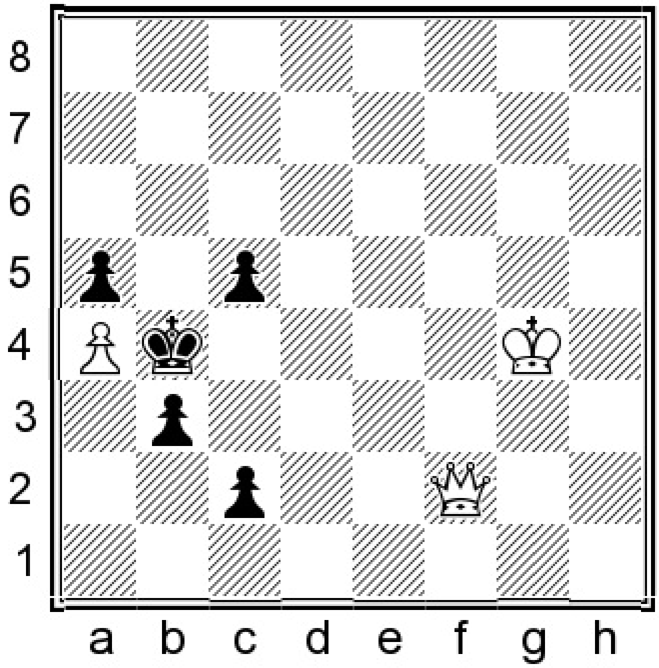
81



White to move

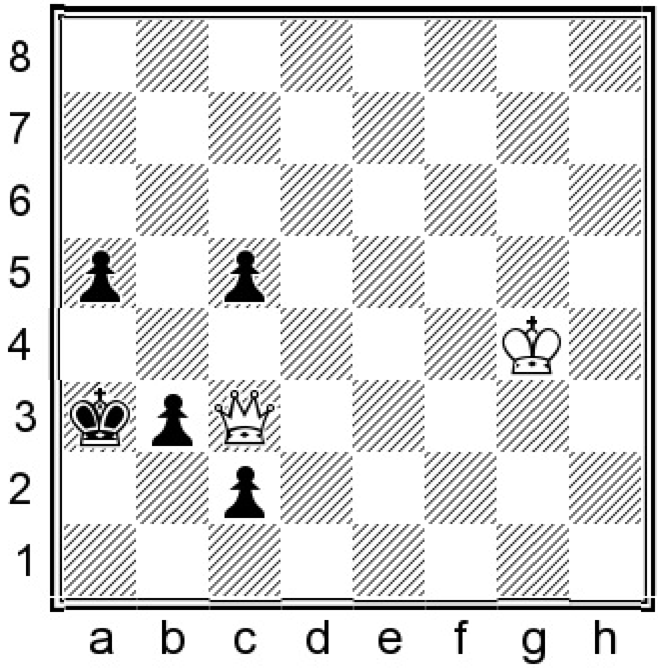
Can White win?

Show/Hide Solution

81

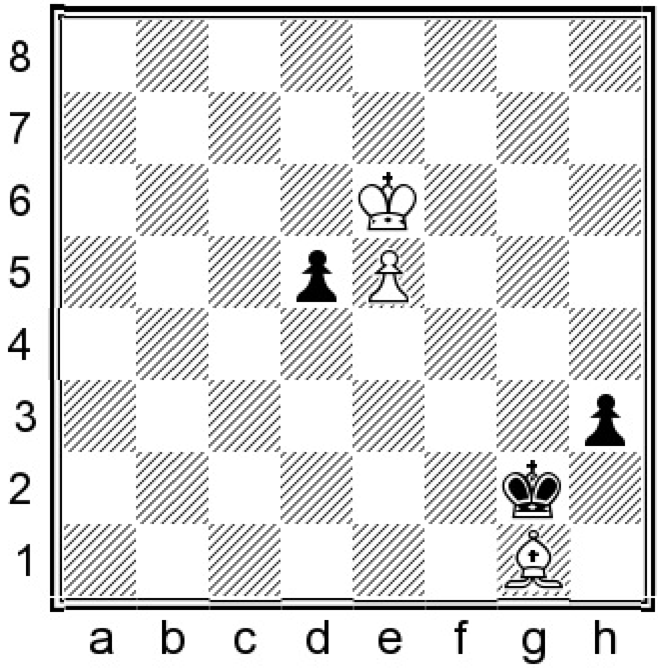
Aleksandr Karpatchev 2442
Cristina Foisor 2398
Deizisau 2014 (7)

There are many black pawns and one of them is on the seventh, but here too the queen can stop them all. **50.♕e1+!** The key manoeuvre. **50...♔xa4 51.♕c3!** From here the queen has all the pawns under control and gives the king time to arrive. 51.♕a1+ was also sufficient. **51...♔a3**



White can bring his king closer or place the queen on a1: **52.♔f3!** 52.♕a1+! ♔b4 gives White more (although not infinite) scope for bringing his king closer. **52...♔a2 53.♔e2 a4 54.♔d2 a3 55.♕c4 ♔b2 56.♕xc5 a2 57.♕c3+ ♔a3 58.♔c1** The king has arrived. **58...♔a4 59.♔b2+–**

82



White to move

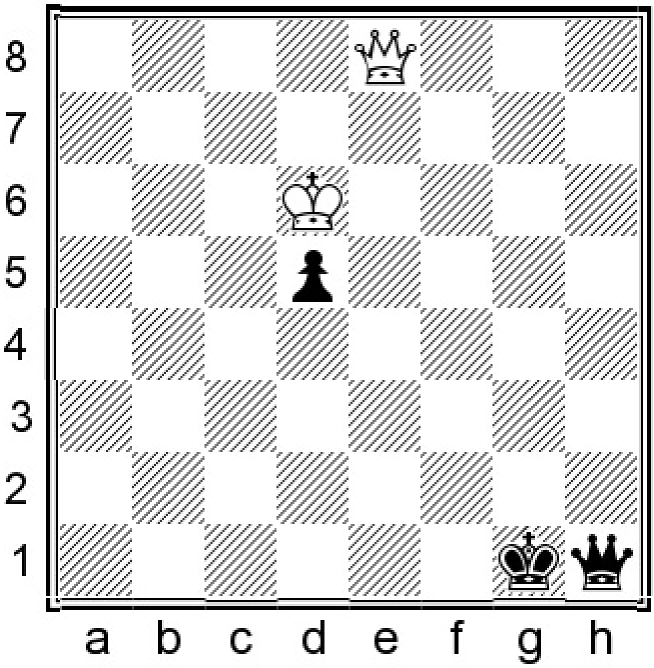
What can White achieve?

Show/Hide Solution

82

Ekin Ozenir 2262
Borko Lajthajm 2431
Suleymanpasa 2019 (9)

White can make a draw in the inevitable queen ending as long as he takes care with the square to which he moves his king. **74.♔f6?** 74.♔d6! ♔xg1 75.e6 h2 76.e7 h1=♕ 77.e8=♕

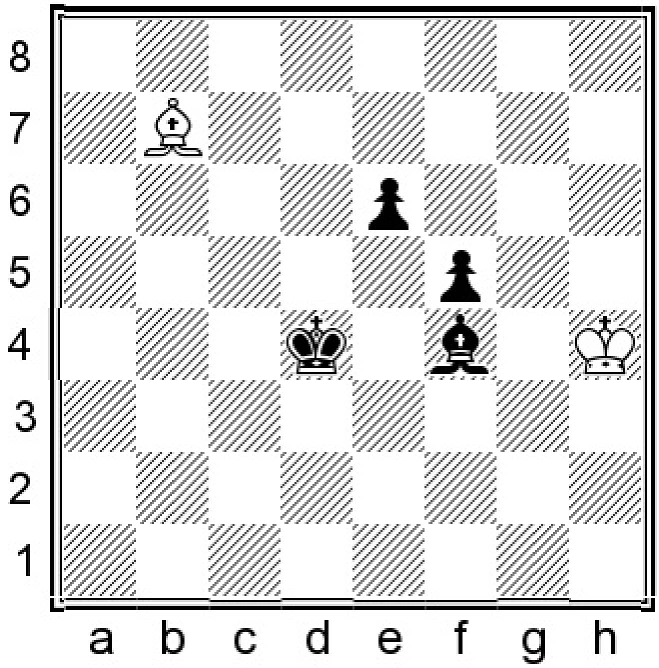


analysis diagram

and White’s king helps the queen in the attack on the pawn, which cannot be held.

74.♔f6? ♔xg1 75.e6 h2 76.e7 h1=♕ 77.e8=♕ ♕f3+ 78.♔g7 d4 Now the pawn is unstoppable.

83



White to move

Can White save the game?

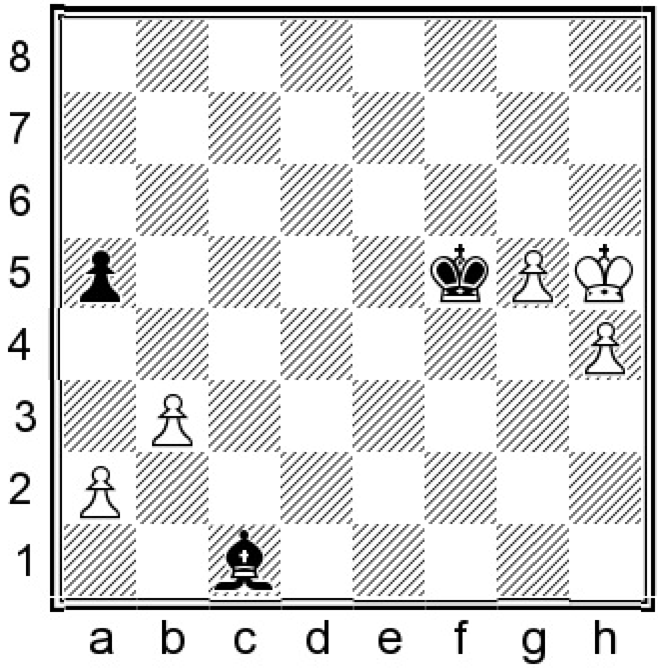
Show/Hide Solution

83
Analysis
2020

Lateral control and attacking a pair of passed pawns from behind is not common, but this example shows that it is quite possible:

1.♔h5! ♗d2 2.♗c8 ♔e5 2...f4 3.♗xe6!. **3.♔g6!=** followed by ♔f7.

84



White to move

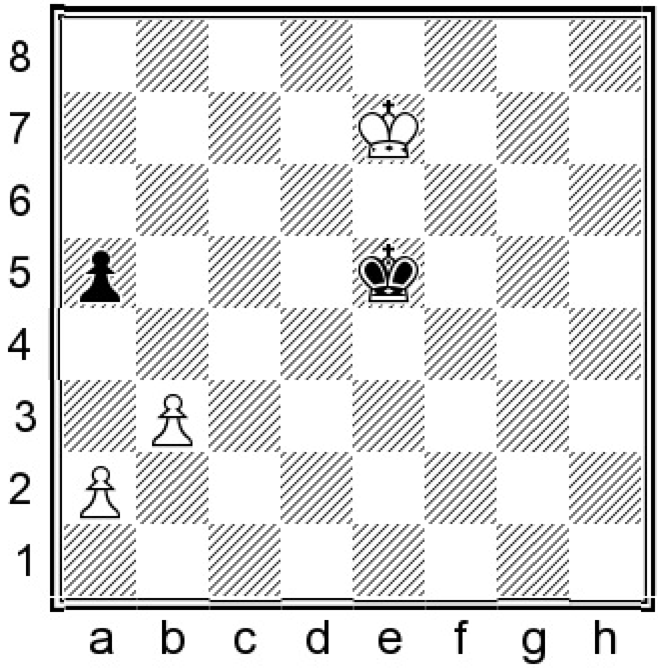
What can White achieve?

Show/Hide Solution

84
Omar Almeida 2475
Yury Lapshun 2452
Sants 2006 (8)

Most players with white would settle for a draw here, but with a surprising idea, he can win: **45.♔h6?** 45.a4!! ♗d2 46.♔h6 ♔g4 47.♔h7 ♔xh4 48.g6 ♗c3 49.g7 ♗xg7 50.♔xg7 ♔g5+–.

45.♔h6? ♔g4 46.♔h7 ♗xg5 47.hxg5 ♔xg5 48.♔g7 ♔f5 49.♔f7 ♔e5 50.♔e7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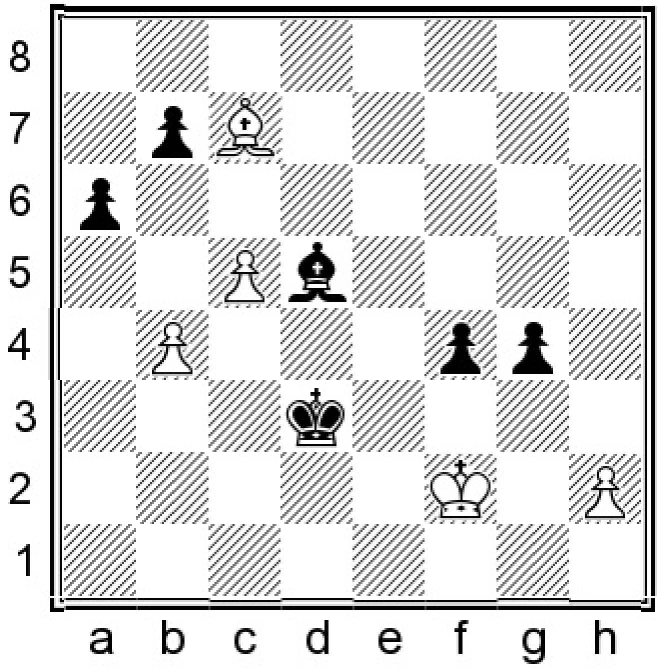
Of course White must have relied on winning this position. **50...a4! 51.b4** 51.bxa4 ♔d5 52.♔d7 ♔c5 53.♔c7 ♔b4 54.♔b6 ♔xa4=. **51...a3!** 51...♔d5? loses, of course: 52.a3 ♔c4 53.♔d6 ♔b3 54.b5 ♔xa3 55.b6 ♔b2 56.b7 a3 57.b8=♕++–. **52.b5 ♔d5 53.b6 ♔c6 ½-½**

85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Black to move

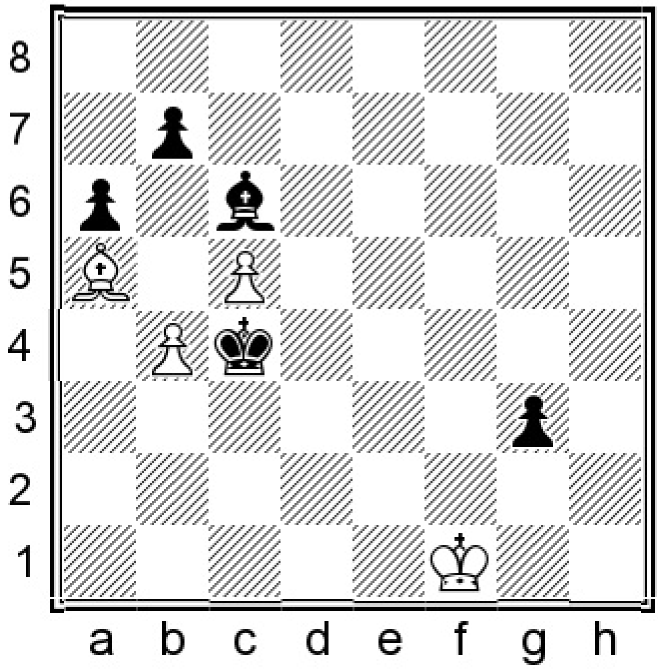
Can Black win?

Show/Hide Solution

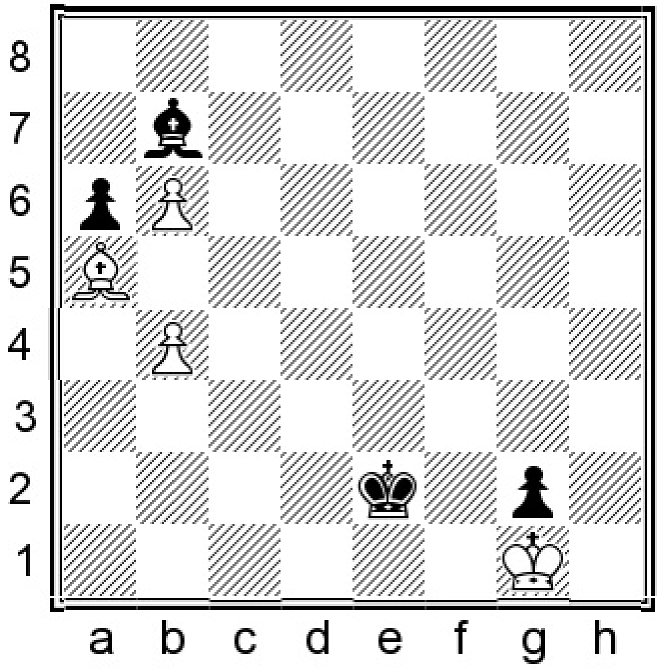
85
Ian Schoch 2164
Ryan Goldenberg 2271
USA tt 2013

With only one extra pawn, it seems mission impossible, but White’s queenside is not very solid. **58...♔c4?** Why allow the exchange of a pawn? 58...f3! 59.♗d8 ♔c4 60.♗a5 b6 61.cxb6 ♗b7 62.♔e3 ♔b3 63.♔f2 ♔c2 64.♔e1 ♔d3 65.♔f2 ♔d4, winning for the same reason as in the game.

58...♔c4? 59.♗a5? 59.♗xf4 draws in this way: 59...♔xb4 60.♗d6! ♔b3 61.♗c7 ♔b4 62.♗d6 ♔b5 63.♔e3 a5 64.♔d4=. **59...♗c6 60.♔g1 g3 61.hxg3 fxg3 62.♔f1**

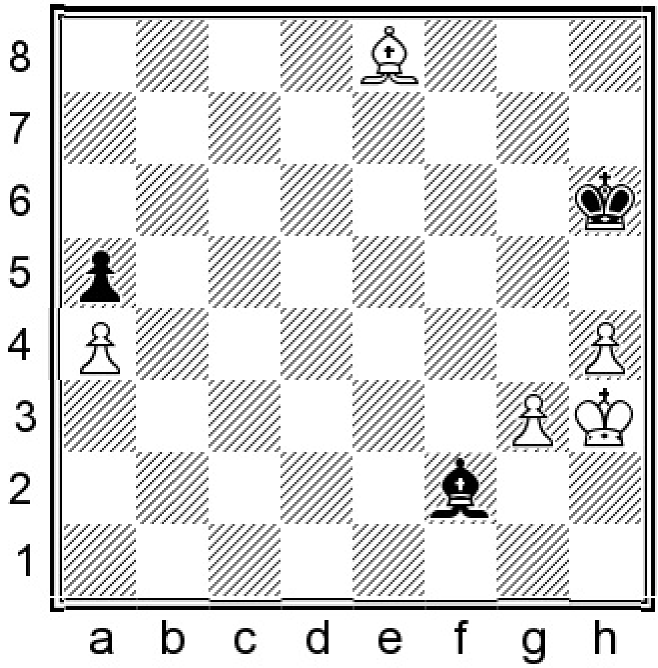


62...b6 The winning idea. **63.cxb6 ♗b7 64.♔e2 ♔b3 65.♔e3 ♔c2 66.♔e2 g2 67.♔f2 ♔d3 68.♔g1 ♔e2**



White is now forced to give Black another passed pawn: **69.b5 axb5 70.♗b4 ♔d3 71.♔f2 ♔c4 72.♗e7 b4 73.♗f6 ♔d3 74.♗e7 b3 75.♗a3 ♔c2 76.♔g1 b2 77.♗xb2 ♔xb2 0-1**

86



Black to move

Can Black save the game?

Show/Hide Solution

86

JW Bell

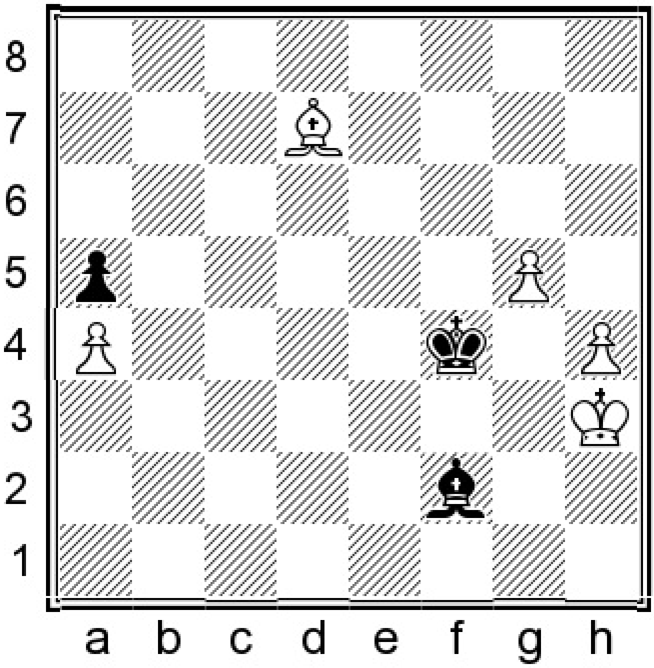
AE Nield

cr (analysis)

This example appears in the book *On the endgame*, a collection of the magazine articles of the late Cecil Purdy. The only reference given is that it was played in the championship of the Correspondence Chess League of Australia between the above two players.

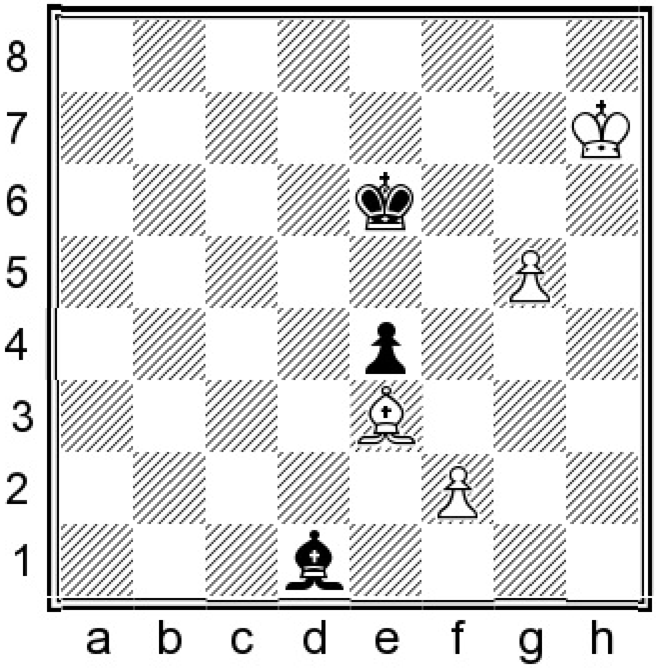
7...♔g7! Black has just enough time to transfer his king to a position of *lateral control* of the pawns, which works against two wing pawns. The loss of even a single tempo loses the game, e.g. 7...♗e1 8.g4 ♔g7 9.g5+– followed by ♔g4 and h4-h5-h6.

7...♔g7! 8.g4 ♔f6 9.g5+ ♔f5 10.♗d7+ ♔f4



This is the position in which Black has the pawns under control and if they advance they will be blockaded on light squares.

87



Black to move

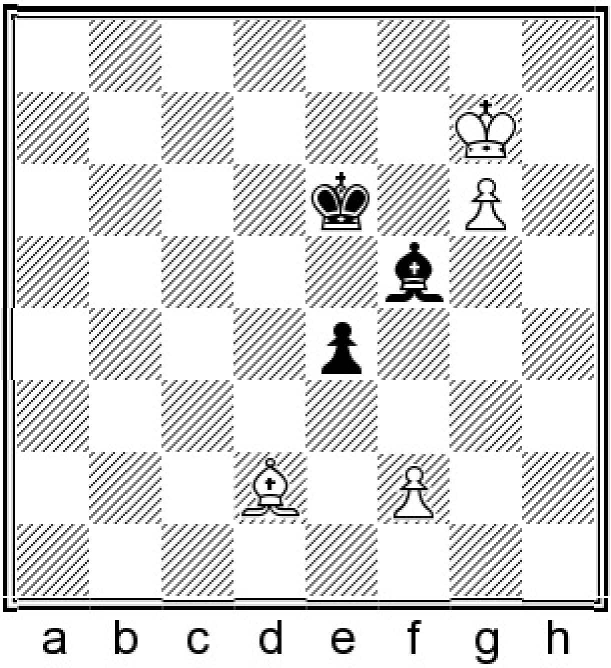
Can Black save the game?

Show/Hide Solution

87
Hou Yifan 2570
Nguyen Anh Dung 2464
Kuala Lumpur 2010 (5)

Only one extra pawn, but it is very difficult to stop it, due to the bad position of the black pieces. Black must fall back on the concept of *pawns in the crosshairs* and target the g-pawn:

58...♗g4! 59.g6 ♗f5! 60.♔g7 ♔e7 61.♗g5+ ♔e6 62.♗d2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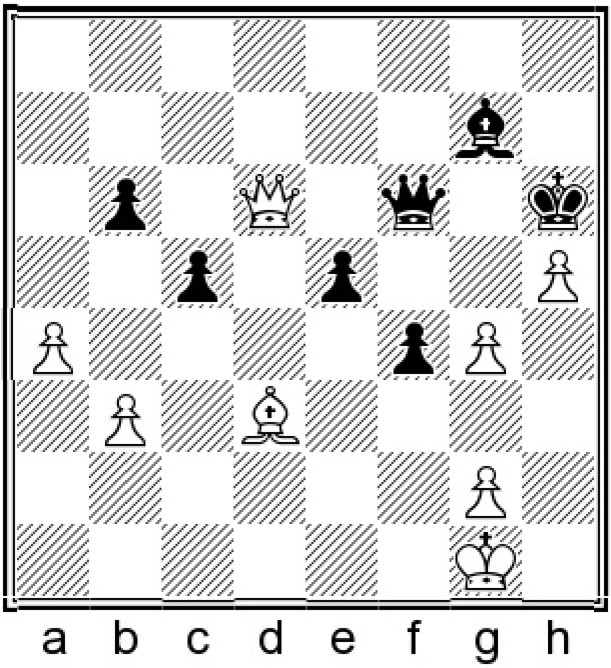
62...e3 Not necessary but natural in view of the anxiety of the bishop to reach the correct diagonal; 62...♔e7 63.♗b4+ ♔e6 64.♔h6 ♔f6 65.♗c3+ ♔e7 66.g7 ♔f7!=. **63.♗xe3 ♗c2 64.f4 ♔e7 65.♗d4 ♔e6 66.♗c5 ♗d3 67.♔h6 ♗c2 68.♗d4 ♗d3 69.♔g5 ♗c2 ½-½**

88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White to move

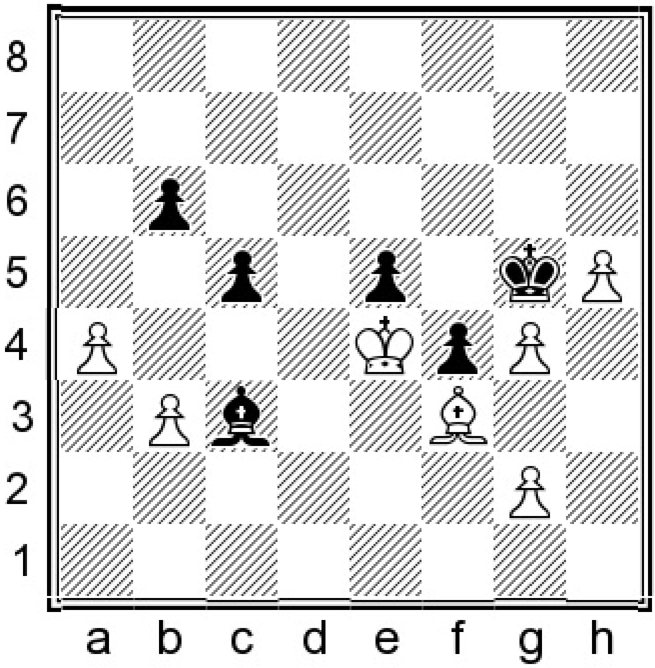
Can White win by exchanging queens?

Show/Hide Solution

88
Wang Yue 2716
Ding Liren 2749
Danzhou 2015 (5)

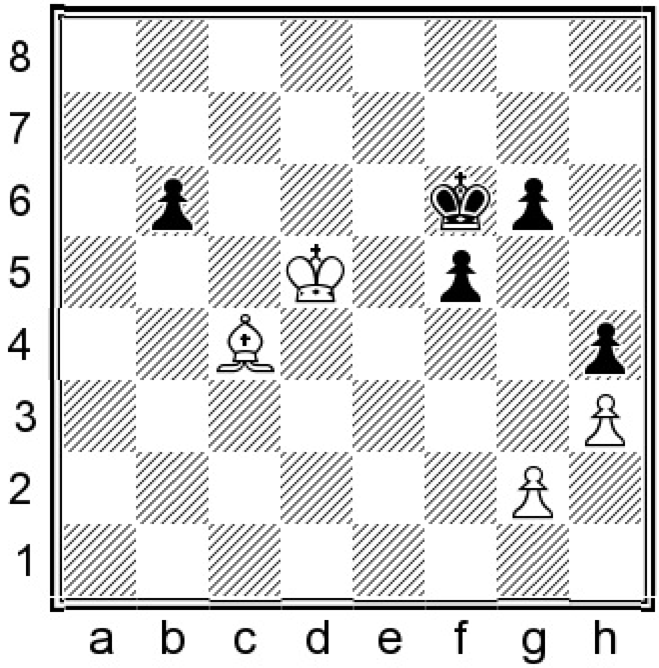
The exchange is correct. White wins, thanks to the theme of trapping the bishop on a5 after the pawn break b3-b4:

46.♕xf6+! ♗xf6 47.♔f2 ♗h4+ 48.♔f3 ♔g5 49.♗e2 ♗e1 50.♔e4 ♗c3 51.♗f3



51...♗b4 Black can try to keep the e5-pawn defended with 51...♗b2, but this also loses following the manoeuvre 52.♔d5 ♗c3 53.♗e4 ♗a5 54.♔e6 ♗e1 55.♔f7 ♔h6 56.♔f6 ♗h4+ 57.♔xe5 ♗g3 58.♔d5, essentially transposing to the game. **52.♔xe5!? ♗c3+ 53.♔d5 ♗d2 54.♔c6 ♗a5 55.♗d1 ♔h6 56.b4! cxb4 57.♗b3 ♔g5 58.♔d5** and Black resigned.

89



White to move

Can White win?

Show/Hide Solution

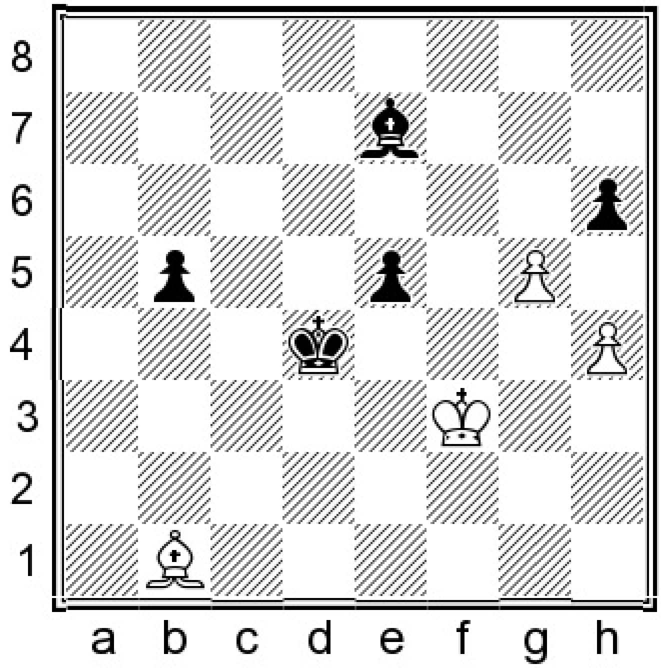
89
Alexei Shirov 2580
Rico Mascarinas 2465
Manila 1990 (1)

Yes, White wins, but he must begin with a strange move:

51.♔d6!! Moving the king away from the critical zone. The game ended in a draw with the variation 51.♗d3? g5 52.♗e2 b5! 53.♗xb5 g4 54.hxg4 ♔g5! and if 55.gxf5 h3 56.gxh3 ♔xf5=.

51.♔d6!! g5 52.♗e2 b5 52...g4 53.hxg4 ♔g5 54.gxf5 ♔xf5 (54...h3 55.g4!) 55.♗b5! ♔f4 56.♗d7+–. **53.♗xb5 g4 54.hxg4 ♔g5** 54...fxg4 55.♗d7 ♔g5 (55...h3 56.g3+–) 56.♔e5 h3 57.g3 h2 58.♗c6+–. **55.gxf5 h3 56.g4!** and now, unlike in the game, the bishop can stop the pawn: **56...h2 57.♗c6+–**

90



Black to move

What should Black do?

Show/Hide Solution

90

Roberto Servat 2450

Marcelo Tempone 2435

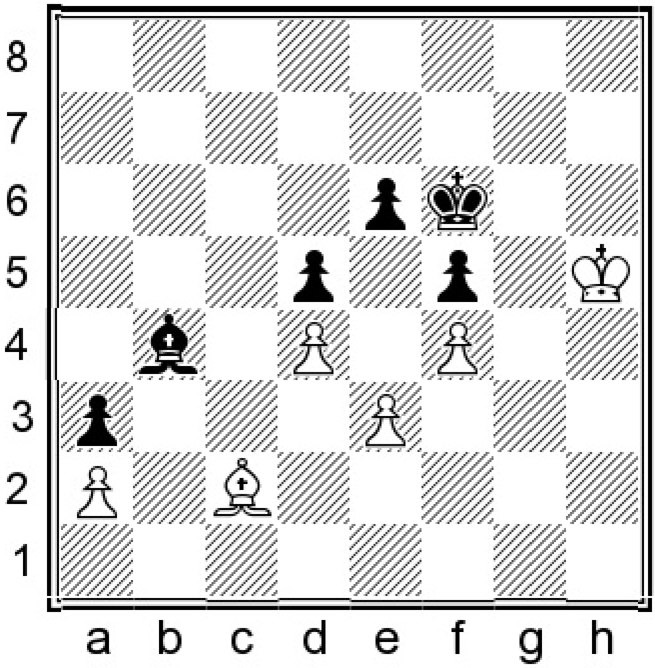
Argentina ch 1995 (analysis)

Two passed pawns separated at that distance do not win, but three pawns can win even without a bishop:

53...♗xg5!! 53...hxg5? 54.hxg5 ♗xg5 55.♔e2=.

53...♗xg5!! 54.hxg5 hxg5 55.♗f5 b4 56.♔e2 e4 57.♗e6 e3 58.♔f1 ♔e5! 59.♗f7 g4–+

91



Black to move

What can Black achieve?

Show/Hide Solution

91

Stefan Bromberger 2440

Suat Atalik 2541

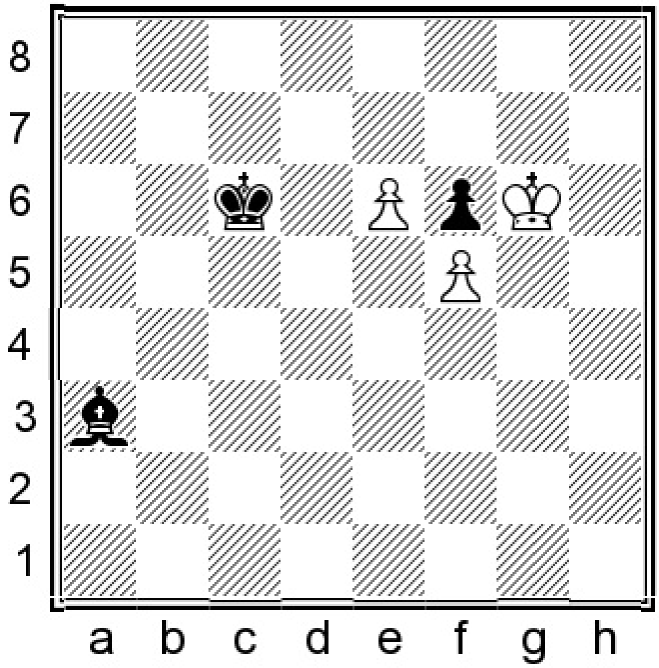
Augsburg 2004 (2)

The white pawns are in great danger, but if Black only captures two of them, he could end up in a position where a successful zonal defence is possible.

60...♗e1! But with this move Black wins all three. White did not want to see the demise of his pawns and he resigned here.

In contrast, the hasty 60...♗d2? allows White to escape by retaining one of his three pawns: 61.♔h4! ♗xe3 62.♔g3 ♗xd4 63.♗b3 ♔e7 64.♔f3 ♔d6 65.♔e2 ♗b2 66.♔d2 ♔c5 67.♗a4! (seeking to counterattack) 67...♔d4 68.♗d7 ♔e4 69.♗xe6 ♗d4 70.♔e2 ♗c5 71.♗f7 ♗d6 72.♗e6 ♗xf4 73.♗d7 ♗e5 74.♗a4 f4 75.♗c2+! ♔d4 76.♗b3! ♗d6 77.♔f3 ♗c7 78.♔e2 ♗a5 79.♔f3 ♗d2 80.♔e2 ♗e3 81.♔f3 ♔c5 82.♔e2 d4 83.♗e6 ♔b4 84.♔d3 f3 85.♗g4 f2 86.♗e2 ♔c5 87.♔e4! ♔d6 88.♗c4 ♔e7 89.♔e5 with a draw (analysis by Atalik).

92



Black to move

Can Black save the game?

Show/Hide Solution

92

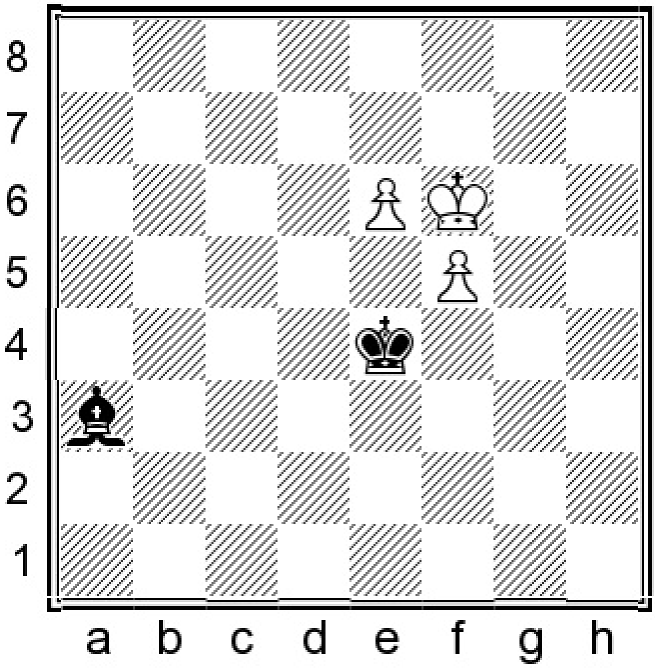
Vincent Keymer

Jan Smeets

Germany Bundesliga 2019/20

Yes, Black can save the game, but only by applying the *tail-hook* mechanism:

1...♔c7?? 1...♔d5! 2.♔xf6 ♔e4



analysis diagram

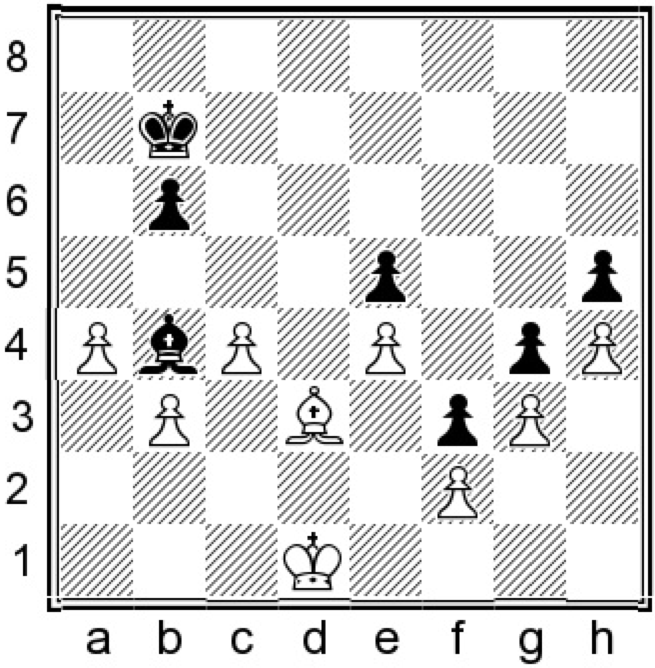
and now that Black has established the *tail-hook*, all White’s attempts are harmless: 3.♔g6 ♔e5!=.

Not 1...♗b2?? 2.e7 ♔d7 3.♔f7+–;

or 1...♗e7?? 2.♔f7 ♔d6 3.♔e8!+–.

1...♔c7?? 2.♔xf6 ♔d8 3.♔f7 ♗e7 4.f6 ♗xf6 5.♔xf6 ♔e8 6.e7 1-0

93



White to move

What can White achieve from this position?

Show/Hide Solution

93

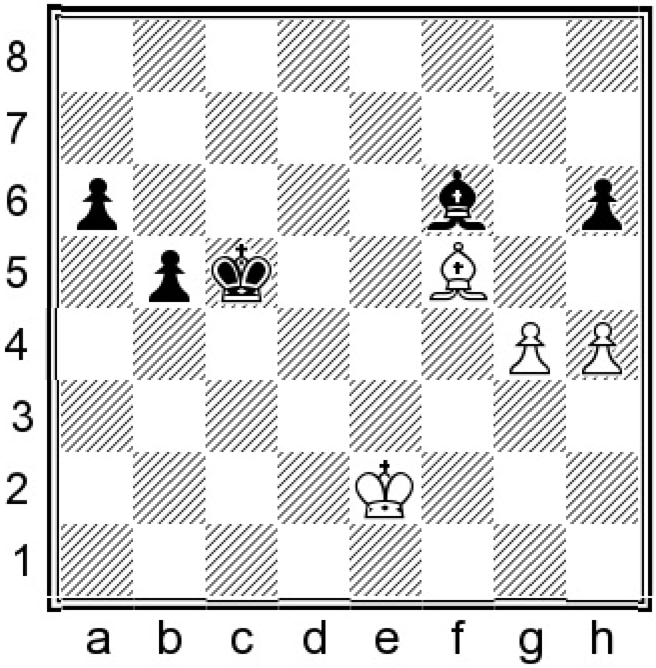
From a rapid game by the author

2020 (analysis)

White can only win or lose. There is no middle ground: **40.c5!** With this move the white bishop is able to capture the three black pawns on the kingside. With any passive move White would lose, e.g. 40.♗c2 ♗c5! 41.♔e1 ♔a6 42.♗d3 ♔a5 43.♗c2 ♔b4 44.♗d1 ♔c3. It is appalling to see the lamentable position of the two white pieces.

40.c5! ♗xc5 41.♔e1 ♔c6 42.♗c4+–, followed by ♗f7 etc.

94



White to move

42.g5, 42.h5 or something else?

Show/Hide Solution

94
Vladimir Kramnik 2800
Ian Nepomniachtchi 2730
Moscow 2011 (1; analysis)

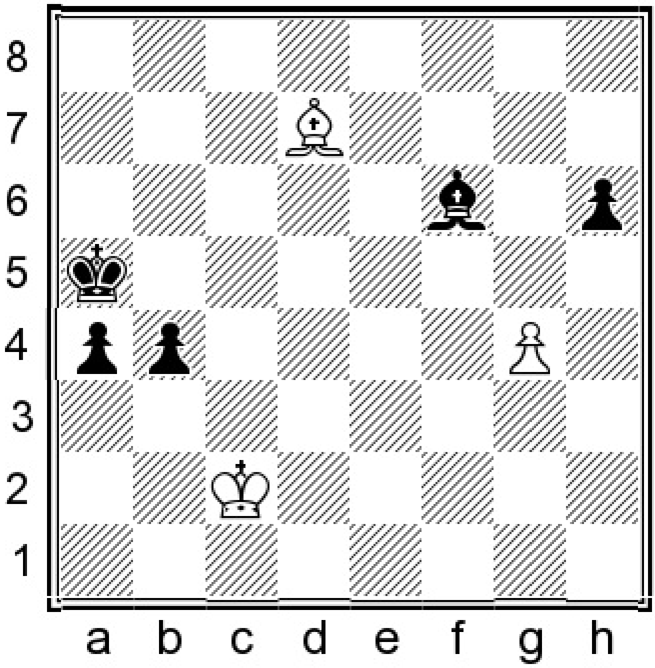
Well, oddly enough, neither 42.h5 nor 42.g5, but something else.

42.♔d3! should draw, as should other moves that bring the king closer to the black pawns.

A) 42.h5? saves a pawn (an unimportant one) but loses a tempo, which prevents the white king from opposing the advance of the black pawns: 42...b4 43.♔d3 b3. Once this pawn reaches b3, the following moves of Black's manoeuvre are unstoppable: ...♔b4, ...a5-a4-a3-a2;

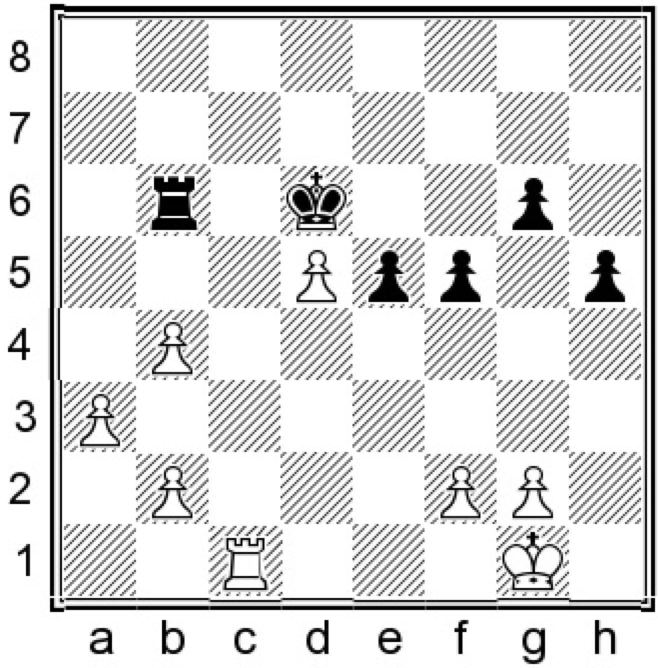
B) 42.g5? loses just as easily, but in a more surprising manner: 42...♗xg5!!. Now the three passed pawns win easily (in contrast, the two pawns and the bishop do not win; this example serves to highlight the low value of the stronger side's bishop in opposite-coloured bishop endings: 42...hxg5 43.hxg5 ♗xg5 44.♔d1 a5 45.♔c2 a4 46.♗e6 and White has arrived in time to set up an impregnable defensive position): 43.hxg5 hxg5 44.♔d3 a5 45.♗g4 a4 46.♗f5 b4 47.♗d7 a3 48.♔c2 ♔d6 49.♗g4 ♔e5–+.

42.♔d3! ♗xh4 43.♔c2 a5 44.♗g6 a4 45.♗e8! It is essential to prevent the advance of the b-pawn to the b3-square and to force the black king to position itself on a5 to support it. **45...♗f6 46.♗d7 ♔b4 47.♗e8 ♔a5 48.♗d7 b4**



Once the black king is on a5 and the b-pawn has advanced to b4, White changes the position of his king to employ defence by lateral control: **49.♔d3!** Let us see how failing to apply lateral control loses: 49.♗e6? ♔b6 50.♗f7 b3+ 51.♗xb3 axb3+ 52.♔xb3 ♔c5 53.♔c2 ♔d4 54.♔d2 ♔e4 55.♔e2 ♗d4! and the white king fails to reach the corner. **49...b3 50.♔c4!=** Applying lateral control. No progress is possible.

95



White to move

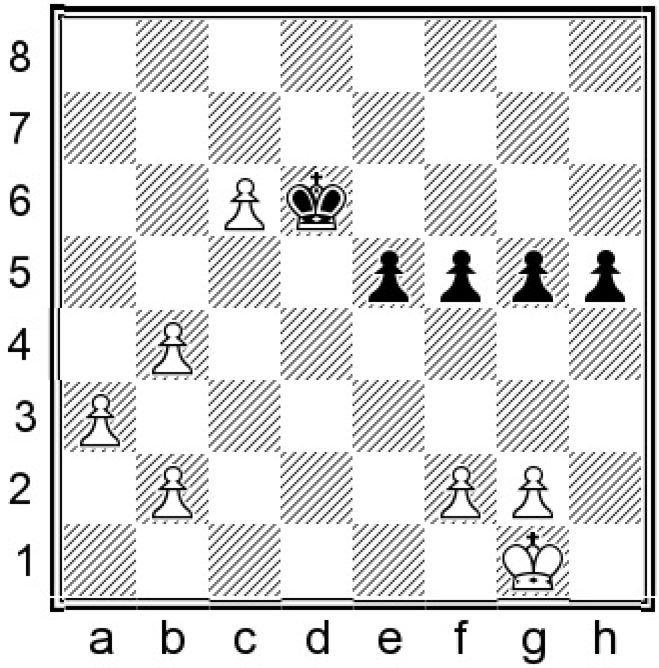
What result does the move 38.♖c6 lead to?

Show/Hide Solution

95
Daniel Naroditsky 2587
Conrad Holt 2574
USA tt 2014

It is not bad if you decided that exchanging the rooks does not win. But it is much better if you saw that in fact it loses!!

38.♖c6+? ♖xc6 39.dxc6 g5!

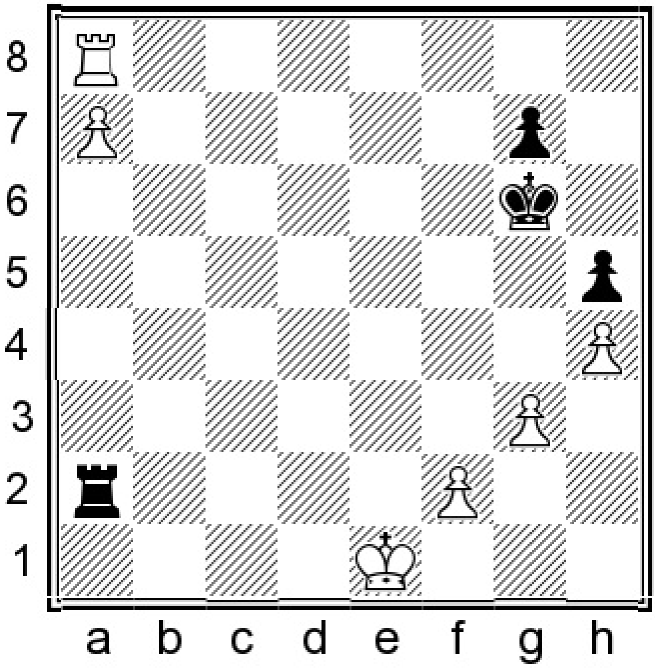


This is the winning move. The 4-2 majority will eventually become two passed pawns separated by two files, which will reach the eighth rank.

Instead, the game continued in a very natural way with 39...♔xc6?. It appears necessary to reduce the number of White's passed pawns, but they are not dangerous and it is more urgent to improve the quality of the black majority, which by itself is able to produce a queen: 40.f4! exf4 41.♔f2 ♔b5 and the game could have already been agreed a draw here: 42.b3 g5 43.♔f3 h4 44.♔e2 g4 45.♔f2 ♔c6 46.a4 ♔b6 47.b5 ♔c5 48.b4+ ♔b6 49.♔g1 g3 50.♔f1 f3 51.gxf3 h3 52.f4 ♔b7 53.a5 ♔a7 54.b6+ ♔b7 55.b5 ♔b8 56.a6 ♔a8 57.b7+ ♔a7 58.♔g1 ♔b8 59.♔h1 ♔a7 60.b6+ ♔b8 61.♔g1 h2+ 62.♔h1 g2+ 63.♔xg2 h1=♕+ 64.♔xh1 stalemate.

40.b5 e4 41.♔f1 h4 42.a4 g4 43.a5 ♔c7! It is essential to prevent the advance of the a-pawn; if 43...f4?? 44.a6 wins. **44.a6 ♔b6 45.b4** There are many other moves, but there is no way to prevent the inexorable advance of the black pawns. **45...f4 46.♔g1 h3 47.gxh3 gxh3 48.♔h2 e3** and one of the pawns queens.

96



White to move

Can White win?

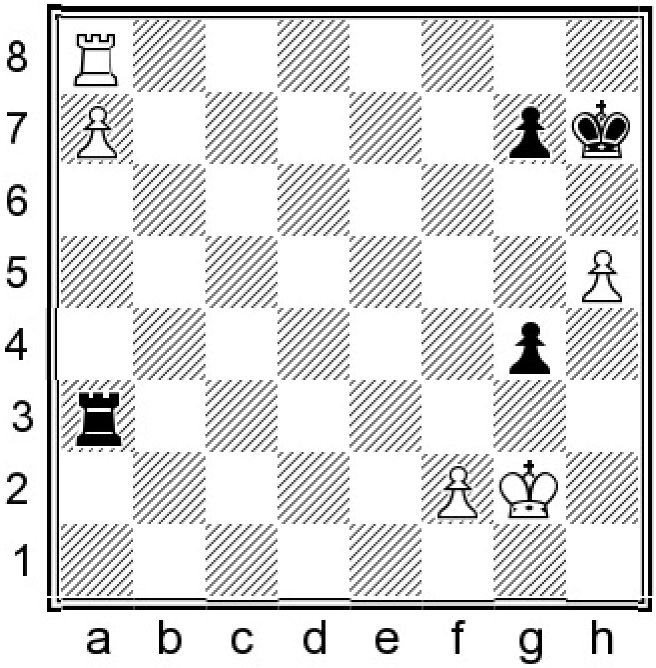
Show/Hide Solution

96
Johann Brittner
Andreas Guthman
Eisenberg 1993

We have already seen that in this structure White is unable to create a passed pawn, but here the position of the black king is not ideal and this allows two interesting tries. One of them is winning.

49.f4!

A) 49.g4!? is attractive but fails to achieve the objective: 49...hxg4 (Black must capture) 50.♔f1 ♔h7 51.h5 (51.♔g2 g6!=). Now White has created a weakness on g4. If he can capture this pawn without any change to the pawn structure, he will be able to create a passed pawn and win: 51...♖a4 (51...♖a3? would lose, because after 52.♔g2 Black is in zugzwang and cannot prevent the loss of the g4-pawn, after which the f-pawn will eventually become a passed pawn:



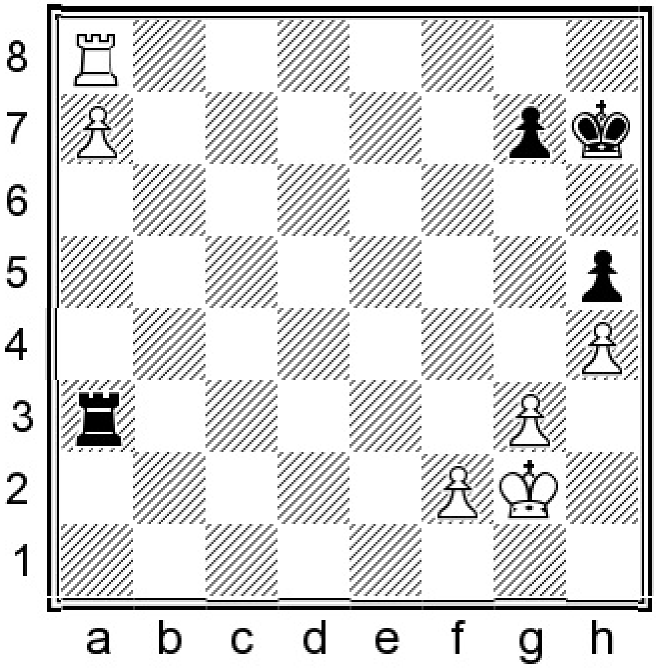
analysis diagram

52...♖a4 53.♔g3 ♖a3+ 54.♔xg4 ♖a4+ 55.f4 ♖a5 56.f5 ♖a4+ 57.♔g3 ♖a2 58.h6!+–) 52.♔g2 ♖a3! 53.♔g1 (53.♔h2 g3+!=) 53...♖a5! (preventing ♔h2 and ♔h1) 54.♔g2 ♖a3 55.♔h1 ♖a5! (preventing ♔h2) 56.♔g1 ♖a2 57.♔g2 ♖a3! 58.♔h2 g3+!= and now White will be unable to have a passed pawn on the f-file;

B) The game saw 49.♔d1? ♔f7? (49...♔h7 forces the draw) 50.♖h8, with a draw in 63 moves.

49.f4! ♔h7 49...♔f7 50.f5 is the same. **50.f5!** and now a passed pawn on the f-file is guaranteed (by means of the pawn breaks g3-g4 and (h4-)h5-h6), but if it is created too quickly Black will have counterplay with his pawns: **50...♖a5 51.♔d2 ♖a6 52.♔e3 ♖a3+ 53.♔f4 ♖a4+ 54.♔g5 ♖a5 55.g4! hxg4 56.♔xg4** and now the pawn break on h6 and the advance of the f-pawn are inevitable, no matter how many checks delay Black's fate.

97



White to move

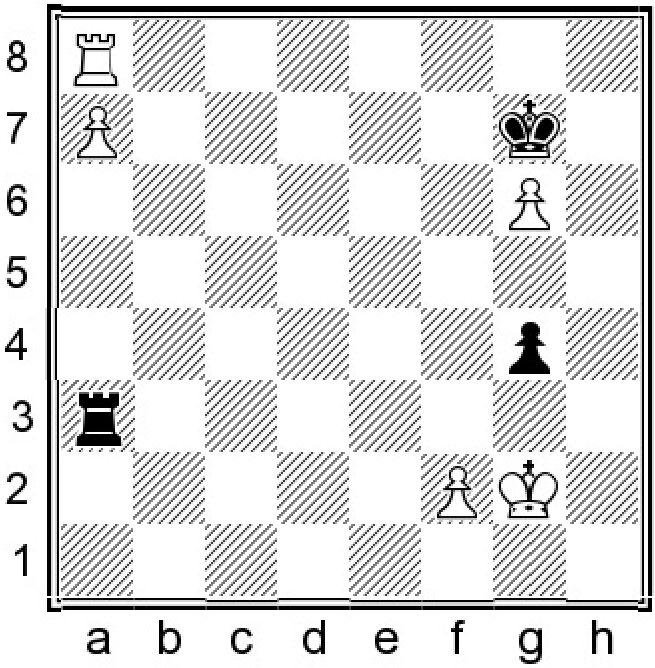
And here?

Show/Hide Solution

97
Craig Hanley 2419
Eric van Uytven 2167
Charleroi 2006 (3)

It is surprising, but here the winning move is the other one: **43.g4!! hxg4! 44.h5+–** If we have studied the previous example attentively, we shall know now that the white king and the black rooks are situated in a miraculous position of reciprocal zugzwang. **44...♖a1**

44...g6! would have exacted a high price. 45.hxg6+ ♔g7 and now White must not wait:

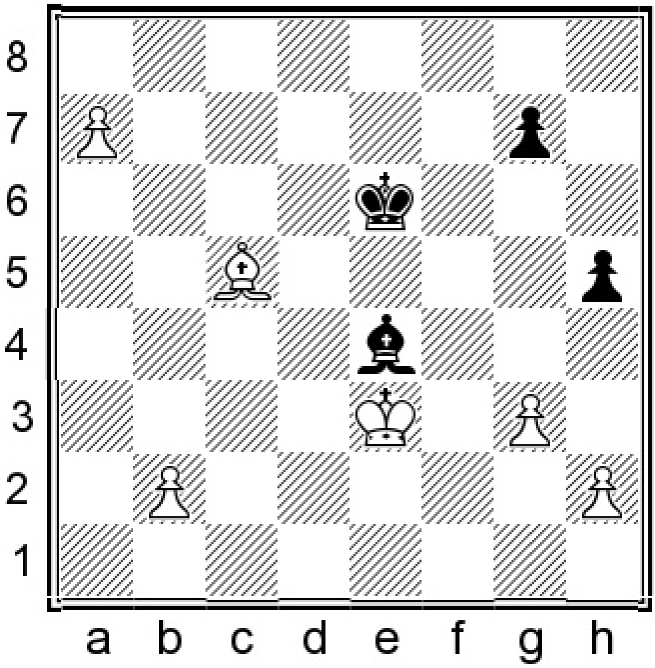


analysis diagram

46.♔h2 g3!, with an immediate draw; nor must he bring out his king to the centre: 46.♔f1?! ♖a4 47.♔e2? g3! 48.f4 (48.f3 ♖a1!=) 48...g2! 49.♔f2 ♖xf4+. Instead he should play 46.♔h1! ♖a2 47.♔g1 ♖a4 48.♔h2, planning to continue with ♔g3, and if 48...♖a3 49.♔g2!+–. Another zugzwang, although not a reciprocal one this time, because the white king is able to triangulate.

45.♔g3 ♖a4 46.♔h4 ♖a1 47.♔xg4 ♖a6 48.♔f5 ♖f6+ 49.♔e5 ♖a6 50.f4 ♖a1 51.f5 ♖a2 52.h6 ♖a5+ 53.♔e4 ♖a4+ 54.♔d5 ♖a5+ 55.♔e6 ♖a6+ 56.♔e7 ♖xh6 57.♖d8 1-0

98



White to move

Can White win?

Show/Hide Solution

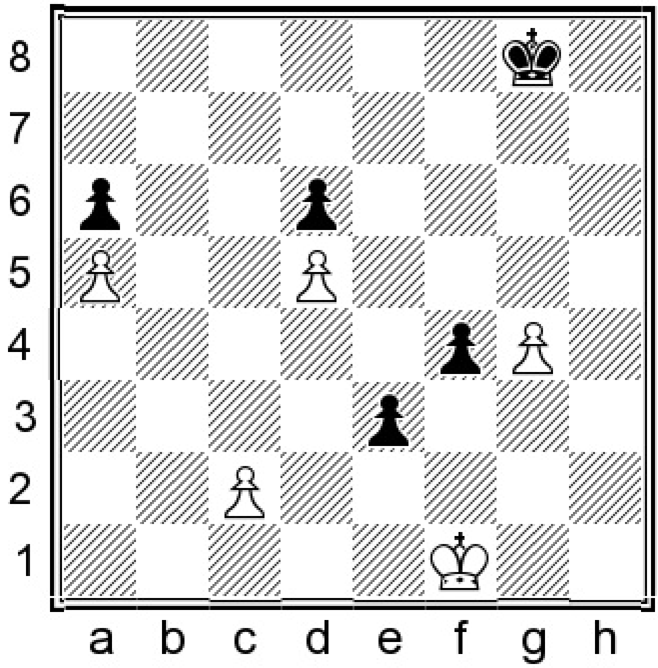
98
Max Euwe
Daniel Yanofsky
Groningen 1946 (1)

If we have studied **Pattern 45** well, we might suspect that we are at a momentous decision point in this game. **35...♔f5!** would have allowed Black to maintain *zonal defence* on both wings of the board.

Instead, 35...♗g2? 36.♔f4! g6 was the game continuation.

35...♔f5! 36.♗f8 g6 37.♔d4 ♗g2 38.♔c5 ♔e6! Zonal defence. **39.♔b6 ♔d7=**

99



Black to move

What can Black achieve?

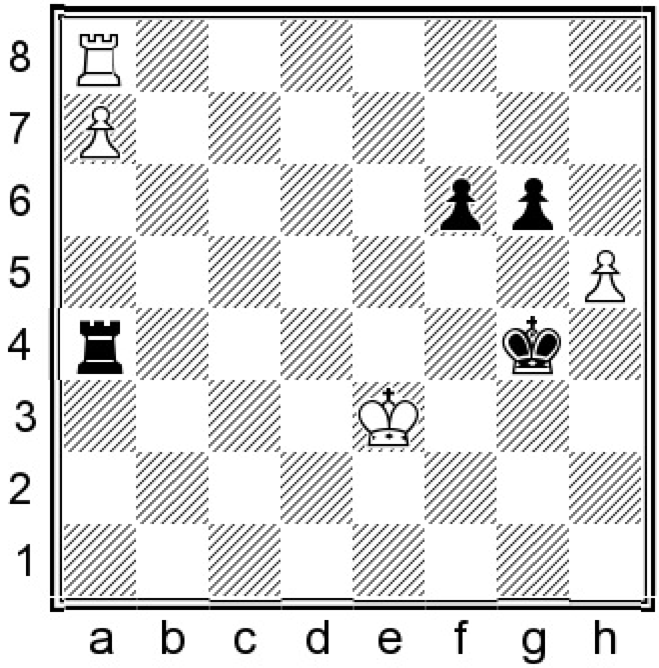
Show/Hide Solution

99
Pontus Carlsson 2447
Kirill Shevchenko 2542
Czechia tt 2019

Black could have drawn, but only with a very subtle continuation: **1...♔f7!** controls the pawns. 1...f3?, the obvious move, loses here, because two separated passed pawns beat two connected ones: 2.c4 f2 3.g5 ♔f7 4.c5 dxc5 5.d6 c4 6.d7 ♔e7 7.g6 c3 8.g7 c2 9.d8=♕+, gaining a tempo by queening with check: 1-0.

1...♔f7! 2.c4 ♔f6 From here the black king prevents the floating square from stretching as far as the end of the board and White is now forced to play accurately in order to prevent loss. **3.♔e2** 3.c5? dxc5 4.d6 ♔e6–+. **3...♔e5 4.♔d3 ♔f6 5.♔e2**, with a draw.

100



Black to move

How does Black save the game?

Show/Hide Solution

100
Ahmad Ahmadzada 2297
Urfan Sevdimaliyev 2408
Baku 2018 (7)

Black can save the game by applying the Vancura idea, which is the only method that allows the two pawns to be stopped just using the rook: **62...♔f5!!** The king is needed to support the check which will allow the rook to reach the second rank. The game continued 62...♖a3+? 63.♔d2 ♖a2+ 64.♔c3 ♖a3+ 65.♔b2 ♖xa7 66.♖xa7 gxh5 67.♖g7+ ♔f3 68.♖h7 ♔g4 69.♔c2 h4 70.♔d2 1-0.

62...♔f5!! 63.hxg6 Similarly if 63.h6 then 63...♖e4+ 64.♔d3 ♖e7=. **63...♖e4+ 64.♔d3 ♖e7 65.♔d4 ♔g5 66.♔c5 f5 67.♔b6 ♖e6+! 68.♔c5 ♖e7 69.♔d6 ♖g7=**

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Bibliography

Many a good endgames book has been written and this bibliography does not intend to recollect all of them but just to give the reader some advice on which works may help him complete his knowledge or to find material that helps you better understand the theoretical endings and the main topics of the practical endings.

I will cite or recommend three types of books: those that essentially study theoretical endings, those that present ideal material for exercises, and lastly those that analyse practical endings that can help to understand the topics presented in this book. But the division is not entirely strict, because many books mix various aspects.

Theoretical books

Rey Ardid
Spanish Dr. Ramon Rey Ardid's endgame work occupies five volumes. This work is one of the most complete collections of theoretical and practical endings, but some of these books are difficult to obtain, even over the internet. Only in Spanish.

Karsten Müller & Frank Lamprecht: Fundamental Chess Endings (Gambit)
After *Secrets of Pawn Endings*, Müller & Lamprecht published a much more complete project with Gambit. This work can be regarded as a modern encyclopedia of the endgame, and it also covers the most important themes from theory and practice. Therefore, this is an essential reference book, and equally useful as a study book.

Mark Dvoretsky: Dvoretsky's Endgame Manual (Russell Enterprises)
One of the most important works of the legendary Russian coach. The fifth edition has been published, corrected and expanded, with more than a thousand examples. Dvoretsky's explanations are deep and didactic and he was the first to name some of the topics.

Exercise books

Ger van Perlo: Van Perlo's Endgame Tactics (New In Chess)
An exceptional work for its research, and for the beauty of its positions. It can be read like a comic or seriously worked through to develop an excellent intuition for tactical endgame themes. If a tactical theme is not in this book, probably it has never been played.

John Nunn: The Chess Endgame Exercise Book (Gambit)
One of the most useful exercise books, completing Nunn's extensive work on the topic of endings. Some of the positions are especially enjoyable for their ability to surprise, and therefore to teach.

Joel Benjamin: Liquidation on the Chessboard (New In Chess)
The main topic is the decision of when to simplify, which is the key step towards the ending in a practical game. As in the previous two books, the selection of examples is excellent.

Books on practical topics

Johan Hellsten: Mastering Endgame Strategy (Everyman)
One of the leading modern works focused on presenting practical endgame topics. The material is extensive and largely original. It extends beyond the limits of the material outlined in this book.

John Nunn: Understanding Chess Endgames (Gambit)
Within Nunn's extensive work on the subject of endings, this is the book that deals in the most extensive way with the subject of practical endings. The examples are instructive, sometimes brilliant, and always very attractively presented.

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If you are aware of endgame patterns, you spot key moves quicker, analyse and calculate better, avoid making errors and memorize what you have studied more fully.

Most of the patterns Jesus de la Villa presents in this new book are from the phase of the game just before a theoretical endgame turns up. Knowing these practical endgame fundamentals will enable you to fully reap the benefits of what you learned in De la Villa's widely acclaimed classic *100 Endgames You Must Know*.

Studying patterns only makes sense if you are going to encounter them frequently. De la Villa presents those that have the greatest practical importance and explains and illustrates them with carefully selected examples. To show the patterns as clearly as possible, he mainly concentrates on positions in which both sides have just one piece. Presenting positions with more pieces risks blurring the picture and making motifs less straightforward.

The fact that players think in patterns has an important side-effect: their endgame errors tend to repeat themselves. That's why De la Villa has not just included examples from games of elite GM's but also of amateurs. Errors are always instructive and working with this book will seriously reduce the number of typical mistakes you are prone to make. The many practical exercises that De la Villa has selected will help you improve and retain what you have learned.

Jesus de la Villa (1958) is an International Grandmaster born in Spain. He has won the Spanish Championship twice and is a well-known chess coach. De la Villa is the author of the world-famous bestsellers *100 Endgames You Must Know* and *The 100 Endgames You Must Know Workbook*.

"If you've never read an endgame book before, this is the one you should start with."
Grandmaster Matthew Sadler on *100 Endgames You Must Know*

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